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EDITORIAL

NON-SPECIFIC THERAPY.

How medical ideas and practices, like all others it might be said, run in cycles is well illustrated by the attention which has been given within the last few years to the question of the non-specific reaction.

As far back as we can go there were the cautery, the seton, the blister, the sinapism—all considered most potent measures in their day. They were displaced and pushed aside, declared useless, even, as more specific methods were introduced and specific therapy was developed.

For many years attention was concentrated upon efforts to multiply the agents to be used in the application of this specific therapy. Then, perhaps on account of the enormous number of specific agents required to combat the almost unlimited number of

specific causes of disease, or because of the frequently disappointing results of such specific medication, a return to non-specific therapy followed, the attempt to stimulate the entire organism and increase its resistance instead of controlling directly the agent causing the disturbance.

Many types of substances were used and had their vogue in turn: the vaccines, applied in a general or non-specific manner; the protein split products, various chemicals, etc. And a surprising thing is that they all proved more or less efficient clinically. Many theories have been advanced in explanation, but it is not our purpose to discuss them at this time, especially as the literature on the subject is abundant and accessible.

One of the details which is interesting to us, as tending to show how little is new under the sun, is the recent introduction of deep injections of turpentine for overcoming serious infections. Touatre, in his excellent clinical study of yellow fever, published in 1898, in this city, quotes Fochier, of Lyons, as recommending the use of turpentine injections in the fight against grave systemic infections. This *new* idea was getting old more than twenty years ago.

PEACE AT ANY PRICE.

The tendency and demand is for the "peace at any price man" in medical assemblies without a realization "peace" may have its detracting effect upon scientific progress. "What's the use of having ignorance if you can't show it?" It astonishes many of us sometimes when the supposed ignoramus decides to speak. His method may be crude but he often springs a surprise which is very enlightening.

Let us not approve of any method that tends to strangle discussion by encouraging only the *savant* to speak, though it produces great harmony at meetings; on the contrary we should hear from others than the trained teacher. Honeyed praise for a contribution need not be always welcome; we should have controversy and enlightenment when procurable.

Medical men are finding it difficult to increase the attendance at meetings simply because they are confronted with contributions which they dare not refuse to accept. They feel that should they lack the genteel and conventional manner of speech in discussing,

they will be thought anatagonistic. Individuality then is hidden for the sake of peace.

Shall we in this age of progress merely cajole and flatter? If the aim in medical organization is to be constructive and elucidating then, let us not have "peace at any price."

THE SURGEON GENERAL'S LIBRARY.

Expression on the part of many at the State Medical Society Meeting shows a desire for a medical circulating library. The thought is an excellent one and the plan will be of benefit to the members. It will gain for the local organization an increased number of volumes in its library and it will offer an attraction for drawing new members into the State organization.

It is apropos at this time to call the attention of our readers to the existence of the Surgeon General's Library at Washington. The number of volumes contained in this library is tremendous. These books are procurable through what is known as the inter-library loan. It is the policy of that institution to loan to medical men throughout the United States through the medium of their local library. The transportation charges are paid both ways by the borrower.

There is a file of the "Index Catalogue" of this library at many places and also of the "Index Medicus" which is published by the Carnegie Institute. It is truly astonishing how convenient it is to obtain valuable information once you have become familiar with the plan.

ORIGINAL ARTICLES

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. Reprints may be had at reasonable rates if a WRITTEN order for the same accompany the paper.)

MISSED ABORTION.*

By E. L. KING, A. B., M. D.

(From the Department of Obstetrics and Clinical Gynecology, College of Medicine, Tulane University of Louisiana.)

The term "missed abortion" was first used by Oldham in 1847, but the various writers on the subject since then are not yet fully agreed as to the conditions to be fullfilled in order for a case to be classified under this heading. Frankel restricts the definition to cases of intrauterine fetal death, prior to viability, with the complete retention of the uterine contents to or past the calculated date of delivery. Duncan broadens this to include *all* cases of fetal death before term, which go to or past the nine month period. Barnes says that the term missed abortion is abused. "for, as McClintock puts it, every woman who is delivered at term may be said to have missed aborting." He (Barnes) prefers to call this condition "concealed abortion." Litzenberg in a recent paper, gives a very good and comprehensive definition. He says "the term missed abortion is now applied to all cases of death of the fetus *in utero* before viability with no effort at expulsion within the usual time of an ordinary abortion." After viability, the condition would be called missed labor. This definition does not demand that the uterine contents should be retained past the calculated date of delivery, as do those of Frankel and Duncan, nor does it appear that this should be prerequisite. Litzenberg puts "the usual time of an ordinary abortion" as being anywhere from the death of the fetus to a period two months later; if expulsion occcured after that time, he would class it as a missed abortion.

From the paucity of the literature, one would judge that the condition is not frequently encountered. Williams refers to the "rare cases of missed abortion" on one page (pg. 401); on another page (pg. 672) he states that "the condition occurs . . . . .

* Read before the Orleans Parish Medical Society, April 11th, 1921.

comparatively rarely in women. 70 cases were collected from the literature by Graefe in 1896, and 105 by E. Frankel in 1903, though I am convinced from my own experience that such figures give a very inadequate idea of its incidence." Reference to the older text-books bear out this contention, though the term itself is not used. Chailly's Midwifery (1844) refers to "prolonged retention of the dead fetus." Sir J. Y. Simpson, in 1855, reported several cases. By a strange coincidence, articles were published in different journals on this subject in February, 1921, by Litzenberg and by Rongy and Arluck, who reported 13 and 21 cases, respectively. Six cases have come under my own observation in the past four or five years. So it would appear that the occurrence of missed abortion is not a rarity, but that the correct diagnosis of the condition is. Failure to recognize the true status of affairs may at times entail very serious physical consequences for the mother. Again her reputation may be at stake in case an abortion occurs a considerable time after separation from or death of her husband.

Two factors come into play in the etiology; first, fetal death, second, the failure of the uterus to expel the dead fetus. The causes of fetal death are legion, and we are not always able to discover the causative factor in a given case. Many theories are advanced to explain why the uterus does not contract and expel what has become a foreign body. Lessened irritability of the uterus is the theory proposed by Litzenberg, though we are as a rule at a loss to explain why this should be. He leans to Frankel's theory that final expulsion is due to the congestion consequent upon returning menstruation. Rongy and Arluck believe that one of two things may occur. First, slow changes at the placental site may cause early fetal death, but the product of conception does not become a foreign body until the major part of the placenta is affected. Second, fetal death may be primary, from various causes other than placental, and the placental changes are secondary and gradual in onset. Cases have been reported by Simpson and others in which the placenta has continued to grow for some time after the death of the fetus. In other words, according to this theory, the product of pregnancy becomes a foreign body only when the placental degenerative changes are far advanced, and then it is no longer retained, but is expelled.

At first sight, it would seem that retention of the dead ovum for weeks or months would affect the mother's health, but in the

absence of infection the mother often, but not invariably, appears to be in good general health. Chailly says that prolonged retention is harmless provided the membranes are intact, but not otherwise. Practically all modern writers emphasize the point that a dead fetus may be retained for a long period of time without deleterious effect upon the mother. There is a limit to all things, however, and sooner or later indefinite symptoms of a mild toxemia will appear; if infection of the uterine contents occurs, the picture of sepsis will of course be presented.

Several things can happen to the uterine content after fetal death[1]. It may undergo little change other than absorption of amniotic fluid and of some of the body fluid of the fetus, thus giving it an emaciated, shrivelled appearance;[2] it may become surrounded by effused and clotted blood and become a "blood mole";[3] as a result of fibrin formation, the "blood mole" may be converted into a "fleshy mole";[4] it may be compressed and mummified and then be retained for a long period;[5] it may rarely be converted into a lithopedion, which is generally retained indefinitely;[6] it may undergo extensive maceration;[7] septic infection may occur;[8] rarely, skeletonization of the fetus may occur, with very rare instances of perforation of the uterus by the bones;[9] in early pregnancy, the ovum may be partly or wholly absorbed;[10] occasionally, in twin pregnancy, one grows at the expense of the other, which dies and is found at delivery flattened out in the membranes (fetus papyraceous). Simpson in 1855 reported a case in which one fetus of a triplet pregnancy suffered this fate, the other two being delivered at term as living infants.

The diagnosis is not as a rule made on first sight, but should not be especially difficult if the possibility of the occurrence is borne in mind. Observation for a considerable period and careful, repeated vaginal examinations are requisites. It may not be possible to make a positive diagnosis until four to six weeks have elasped. The patient may present practically no subjective symptoms, and may seek advice because of evident lack of progress of the gestation, flabbiness of the breasts, etc. Often she also complains of symptoms of mild toxemia, such as malaise, loss of weight, poor appetite, dull headache and afternoon feever. Litzenberg stresses the fact that missed abortion is a frequent cause of afternoon rise of temperature. There may be a history of a threatened abortion which was apparently averted. Vaginal examination will

reveal a uterus not corresponding in size to the supposed duration of pregnancy, but smaller, and of a peculiar doughy consistency. There may be a dark, sanguineous discharge. Repeated examinations will show that the uterus has not increased in size, but may have actually become smaller. Jellett states that in some cases there is just enough slow bleeding to cause the uterus to enlarge at the same rate as if pregnancy were advancing normally. The temperature of the cervix is the same as that of the vagina, whereas in normal pregnancy it is about one degree higher. Polak states that peptonuria and acetonuria are constant phenomena. Irregular hemorrhage may occur; in one of my cases, it was sufficiently regular for the patient to mistake it for the menstrual flow, and she was very much astonished when she aborted later.

The prognosis is, as a rule, good, and the dead ovum will in most cases be expelled sooner or later, While, as above mentioned, prolonged retention without detriment to the mother is common, we must always bear in mind the danger of varying degrees of invalidism from toxemia, the risk of infection of the uterine contents and consequent sepsis, and the possibility of the occurrence of serious (and, in rare cases, fatal) hemorrhage. The latter may occur either before or after the evacuation of the uterus, especially after, due to its deficient contractile power.

From the above, we can see that, when the diagnosis is once made, the indications for emptying the uterus are clear. This may be accomplished by resorting to the usual methods. In the first two to two and one-half months the contents can generally be removed under anesthesia at one sitting. Few cases will be encountered this early in pregnancy; as a rule, the pregnancy will have advanced to the third or fourth month before fetal death ensues. Hence the usual treatment will be to bring about uterine contractions by the use of the pack, bougies or catheters, bags, etc. Occasionally, vaginal hysterotomy may be necessary. Rongy and Arluck stress the point that instrumentation must be very carefully preformed, on account of the danger of perforation, as the placenta may be rather firmly adherent and the uterine wall may be abnormally thin and friable. Due to changes in this wall and its consequent lack of contractility, hemorrhage after evacuation of the contents may be profuse, and at times so intractable as to necessitate a rapid hysterectomy, preferably abdominal. If the diagnosis is first made at or near the expected date of delivery,

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and the patient is in good condition, we may temporize, hoping that contractions will ensue at that time. As a rule, the patient's best interests will be served by evacuating the uterus as soon as the diagnosis is established. In four of the six cases detailed below, however, delivery was spontaneous.

Case 1. Admitted to the Charity Hospital in 1918, supposed to be about six months pregnant. Repeated examinations over a period of several weeks showed a uterus about the size of a three months' pregnancy, of characteristic consistency, which did not increase in size. Her general health was good. It was decided to induce labor, but the night before the scheduled operation she aborted a three months fetus, which was emaciated and slightly macerated.

Case 2. This patient was seen late in December, 1919; complaint, irregular bleeding. She stated that she menstruated in June; in October, November, and December she bled a few days each. She thought that this was normal menstruation, and decided that her first diagnosis of pregnancy was an error. On examination, the membranes were found to be bulging from the cervix, and the uterus was about the size of a three months pregnancy. She was sent to the hospital, and aborted that night. The fetus was flabby and shrivelled, and corresponded in size to a gestation of three months. The patient was in good health, and had continued her usual work up to the day on which she was first seen.

Case 3. Consulted me in the spring of 1920, stating that she was about seven months pregnant, and was desirous of arranging for confinement. The uterus reached about one-half the way to the umbilicus. She was told that she had probably miscounted. Repeated examinations revealed the uterus at a standstill. Active treatment was considered, but the patient spontaneously aborted a macerated fetus of about four months. This patient had been separated from her husband for four months, and just escaped the unfounded charge of immorality.

Case 4. Admitted to Charity Hospital in March, 1921. Last menstruation in May, 1920; calculated date of delivery, February, 1921. Patient was very defective mentally, and no history as to quickening, fetal movements, etc., could be obtained. The fundus was just above the umbilicus. No fetal heart sounds, movements, or other signs of fetal life were obtained. Death of the fetus was diagnosed. After a few days in the hospital, a one and one-half pound, somewhat macerated fetus was delivered spontaneously. The Wassermann reaction was negative.

Case 5. This case occurred in the practice of Dr. C. Jeff Miller. The diagnosis of fetal death at about three months was made three or four months after death had taken place. The patient was etherized and the uterus was emptied at one sitting.

Case 6. Also a case of Dr. Miller's. Fetal death had taken place at approximately five and one-half months, and the uterine contents had been retained for about three months thereafter. Cervical dilatation was brought about as usual, and when complete the fetus and the placenta were removed under ether. Bleeding was free and the uterus was tamponned. She bled profusely in spite of this, however, so a rapid abdominal hysterectomy was performed, but the patient died shortly after leaving the table.

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DISCUSSION.

Dr. J. S. Hebert: I am very sorry that I did not get here in time to hear the beginning of the paper, as this is a very interesting subject. However, Dr. King has gone over the subject thoroughly; yet, I wish to emphasize the two factors which were absolutely necessary for the condition to be present: 1st. Death of fetus, 2nd. Failure of uterus to expel same.

As to the diagnosis I wish to also emphasize these two points: 1st. It must be definitely established that cessation of growth of the product of conception has taken place. 2nd. Pari passu with death of fetus, the uterus has ceased to grow.

CORRECTIVE RHINOPLASTY, WITH PRESENTATION OF A CASE.*

By DR. ARTHUR I. WEIL.

The case which I am presenting to-night is, I believe the first subcutaneous corrective rhinoplasty done by a Louisiana Surgeon, and as far as I am aware is the first done by any in the Gulf States, though it is possible that others have been done of which I am ignorant. The work is now being done extensively in the East and North, with results eminently gratifying to surgeon and patient, and with marked improvement in the appearance and a consequent cheerfulness and well being of the patient his earning capacity is sometimes materially increased by the operation; for we all know that physical deformity resulting in the ridicule of companions, in self consciousness and embarassment and often sullenness and truculence is not conducive to efficiency or productiveness in a workman. Those who have had a large experience in this work report numbers of instances of increased productiveness as well as increased happiness among their patients.

Formally it was considered necessary to preface a paper describing this operation with a pseudo apology. For a surgeon to devote his skill and energy to a technique designed solely to the improvement of the cosmetic and not the physical well being of

* Read before the Orleans Parish Medical Society, April 25th, 1921.

his patient seemed anomalous. It seemed too much like usurping the field of the "beauty doctor". But the above mentioned results have more than justified the work and the operation is now well entrenched in the field of surgery. If such a large part of the war surgeon's efforts were devoted to remedying the multilations of battle, why not equally important the effort to correct the deformities of nature?

The pioneer in this class of work in America, was Roe, of Rochester, N. Y. Indeed I believe he was the first surgeon anywhere to do the subcutaneous nasal correction. He was followed by Joseph, of Berlin, and since then the work has been taken up by numerous surgeons of this country, among others Cohen of Baltimore, Tieck of New York and Beck of Chicago. I have seen all three of these men work and I wish herewith to testify my indebtedness to them for their help and instruction in preparing myself for this work. The good results which I have seen from their operations has been the chief incentive to me to take up their work in this virgin field.

"Corrective rhinoplasty," as defined by Cohen, "concerns itself with those operations which have for their object the restoration to a presentable form, size and position noses which from accidental or congenital causes, are so deformed as to give the individual an unsightly appearance. The deformities may be divided into two classes. 1. Idiopathic or congenital. 2. Acquired. To the former belong the over developed nose, hump nose, congenital saddle and pug nose, while to the latter belongs all sorts of grotesque alterations in shape and position of the nose caused by fracture or dislocation and likewise by the destruction of the bony or cartilaginous framework from syphilis, tuberculosis and lupus."

"For practical purposes a further classification may be made into deformities affecting the bone and those affecting the cartilaginous portions of the nose. though it frequently happens that both are involved at the same time."

By various modifications of the operation here described, the several classes of deformities can be corrected; a hump on the nose may be removed, a hooked nose made straight, and oversized nose reduced, a laterally deflected nose straightened, a too long nose can be shortened, a flattened or saddle nose elevated, etc.

The purpose of the present report just now when I have only one case to present, is not so much to report the individual case

as to call your attention to the possibility of correcting such deformities; for there are doubtless numbers of patients of your acquaintance who are suffering under the handicap of various nasal malformations and who are ignorant of the possibility of their correction by a comparatively simple and safe operation, with the promise of most satisfactory results.

Sometime in the future I hope to be able to report to you a series of these cases, comprising the various classes of deformities which I shall have corrected. For the present I shall content myself with showing the one case, with a brief description of the operation and presenting the patient here to-night so that you may be the judges of the result. The accompanying photographs will show the shape and contour of the nose before operation. You will note that there is a large hump on the nose, which shows fairly well in the photograph; in addition there was a marked lateral deflection of the nose which made the nose very unsightly, but which cannot be well seen in the photograph. The operation was done on April 12 which is less than two weeks ago and the swelling as you see has not entirely subsided. In the course of a week or two more when the swelling has completely disappeared, the nose will look even better than it does now. You will note that the lateral deflection is practically entirely corrected and the nose is now straight. Of the hump also there is very little left and the contour of the ridge of the nose, though slightly curved presents no disfiguring hump as it did before. It might be mentioned in passing that since this was my first operation of the kind, I was possibly a little overcautious, and, fearing to remove too much of the hump, I may possibly have left just a little more of it than was advisable. This is a mistake which can be easily avoided in further operations, though I am inclined to believe that conservatism in these operations is not altogether a bad fault.

When the patient first came to me for relief he complained, in addition to his deformity, of almost complete nasal obstruction. He was compelled to breathe almost entirely through the mouth. Indeed this complaint very frequently accompanies nasal malformations, especially in those types where there is lateral deflection of the nose. The obstruction is due, practically always, to a deflected septum and it is necessary to correct this by a submucous resection preliminary to the cosmetic operation. This is one reason why the rhinologist is better fitted for these operations than the

Three Weeks After.

Before Operation.

general surgeon. In this case a preliminary submucous resection was done, being careful however to leave as much bone and cartilage behind as possible so as not to weaken the support of the nose. Since the submucous resection, the nasal obstruction is removed and the patient says he can now breathe freely through the nose.

Now follows a brief description of the operation which may be taken as a type; the operations for the other classes of deformities being modified to suit the individual case, whether it be the reduction of an oversized nose, a rib or other bone implant to correct a sunken or saddle nose and the like.

It is necessary that the operation be performed under the strictest aseptic precautions, for infection is the one complication to be feared. This is true in all classes of rhinoplasties but especially in rib or other bone implants for it is readily understood that infection would cause the imbedded bone to slough away and destroy the cosmetic result. The nose and whole face are thoroughly cleansed with soap and water, ether and alcohol. I prefer this to iodine, for after the operation the nose has to be covered for a considerable time by a metal splint to be described later and iodine might irritate the skin and cause maceration from the long contact with the splint. The nose is douched several times with warm sterile saline or boracic acid solution. The hairs in the nasal vestibule are cut off short with small sharp pointed scissors and the nasal vestibule is carefully cleansed with 1 to 5000 bichloride and alcohol or wiped with iodine. To prevent infection from the nasal secretions, especially when operating under general anesthesia which stimulates secretion of the mucus, it is necessary to insert a post nasal tampon to enforce mouth breathing and to pack the nostrils with sterile gauze. This is also of great assistance in preventing blood from running back through the nose into the throat to be aspirated by the patient. Where the operation is done with a local anesthetic it is sufficient to pack the posterior part of the nostrils with sterile gauze. The operator and assistants wear rubber gloves and the same antiseptic precautions are observed as in operating in the abdomen or on the mastoid.

The anesthetic may be local or general. The present case was operated under ether anesthesia but could have been done with cocaine-adrenalin infiltration. The infiltration is done from the nasal vestibule, passing the needles up between the bony and car-

tilaginous nose and the overlying skin, without perforating the skin with the needle.

The object of these operations is to correct the deformity without leaving any scar or disfigurement in the skin. Consequently the incision must be made within the nose, and all the work done subcutaneously leaving the overlying skin of the nose intact. The incision is made within the nose on the left side, in the pyriform fossa, just above the inferior lateral cartilage. With a short sharp knife the incision is begun near the septum and carried laterally as far as necessary, the knife penetrating the mucous membrane and cartilage to the under surface of the skin. The entire skin overlying the left half of the nose is then undermined, extending laterally over the frontal process of the superior maxilla and superior lateral cartilage, and medially over the ridge of the nose; a corresponding incision is then made on the right side and the skin on that side similarly undermined, until it meets the undermined area of the left side. In this way the entire skin covering the nose is elevated from the underlying bony and cartilaginous nose, and forms a sort of a tent under which the rest of the instrumentation is carried out. With ordinary skill this entire procedure can be carried out in a few minutes without perforating the skin. The finger on the outside of the nose follows the knife and acts as a guide. In a like manner the finger outside acts as a guide on all the further instrumentation under the skin tent and by its feel we know just what we are doing.

After the skin was well elevated from the nose, the periosteum was pushed back from the hump and the ridge of the nose with a short periosteal elevator, and, by means of a short saw and a rasp, as much of the hump was removed as was thought advisable leaving the ridge of the nose straight. There remained then the lateral deflection to be dealt with. With the same periosteal elevator the periosteum was pushed from the nasal bone and the nasal process of the superior maxilla. The denuded nasal bone was then sawed through in a line parallel with the ridge of the nose just about at its junction with the nasal process of the superior maxilla. The same process was repeated on the opposite side. The nasal bones were then mobilized as much as possible with the fingers but this proving insufficient to straighten the nose, an Ash forceps, introduced one blade within the incision and the other within the nasal cavity, was made to grasp firmly the

nasal bone. By means of a rotary and an up and down motion of the forceps the nasal bone was fractured from its articulation with the nasal bone on the opposite side, its articulation with the frontal bone and with the frontal process of the maxilla. By this means the bone was thoroughly mobilized. The same process was repeated with the nasal bone of the other side. The Ash forceps was then passed within the nasal cavity, one blade on each side of the septum and the septum fractured as much as necessary to bring the nose to the median line. On account of the previous submucous resection in which most of the deflected bony septum had been removed there was little resistance and very little force was necessary to bring the septum to the median line. The whole nose thus mobilized was moulded into position in the median line.

There was considerable bleeding during the operation but such as it was it was easily controlled by external pressure on the nose, and by the time the operation was completed there was practically no bleeding.

The nose having been brought into proper position, the skin was smoothed down and held in place by means of a saddle of thin copper, patterned previously to suit the shape and size of the nose. This copper saddle was of the kind used by Cohen; indeed the entire technique was very much after the methods which I had seen him employ and the description of the operation follows his. The saddle is covered with adhesive plaster, which not only keeps the copper from coming into direct contact with the nose, but also prevents the edges from cutting into the skin. Within the copper saddle and cut in exactly the same shape and size is a soft piece of cotton flannel backed by a layer of adhesive plaster which acts as a pad for the saddle. An inch and a half strip of adhesive plaster, passing over the saddle and terminating under each ear holds it in place. While the saddle must be snugly fitted and held to the nose, care must be exercised lest the pressure be so great as to interfere with the proper blood supply of the skin.

Before placing the saddle in position both nostrils and vestibules were lightly packed with sterile gauze. Sutures were not used to close the incision.

Cohen mentions the following advantages of the copper saddle over any other means of retention in these subcutaneous operations. "First, owing to its flexibility it can be bent into any desired shape, and the operator is able to make greater or less pressure at

Three Weeks After.

Before Operation.

any required point along the side of the nose. Secondly, by covering the nose in such a splint, the extreme swelling which otherwise must follow is prevented without the least danger of constriction. Thirdly, the skin is held down so evenly that an accumulation of secretion beneath is impossible. Then, also, in working with this soft sheet copper any ordinary pair of scissors may be used."

The saddle was removed and the dressing changed every forty-eight hours, the skin being carefully cleansed with alcohol to prevent maceration.

The local reaction from these operations is sometimes very great, the discoloration being very marked and the swelling of the soft parts and lower lids being sometimes so great as to close the eyes. In my patient the local reaction was comparatively slight and passed off in about a week or ten days. There was no general reaction, no rise of temperature and no vestige of infection. A surprising feature was the almost entire absence of pain after operation, where one would naturally expect considerable pain to follow this rather strenuous manipulation.

DISCUSSION.

Dr. F. W. Parham: I think the case which Dr. Weil has shown us tonight is a demonstration of the feasibility of doing these corrective operations by intra-nasal method. These cases although not afflicted in a way to endanger life are certainly deserving of any effort we can make to restore them to that condition which will permit their enjoying their social and business relations. Dr. Weil has given us the variety of deformities which justify surgical intervention. These may be broadly classified into those with a hump and those with a depression. I think the operation is a very desirable one and a thoroughly justifiable one. I have not done this special class of work myself within the nose as I believe that it is especially the province of the specialist in this branch of surgery. The operation as performed by Dr. Weil is of the type suggested by Joseph of Berlin. Roe, of Rochester, New York, did much of this work some years ago, but it had not become a popular operation until rejuvenated by the experience of the war. Dr. Tieck wrote last year an article on these intra-nasal deformities based upon 1000 operations performed in the last twelve years, and showed that it is quite a feasible operation. I wish to call Dr. Weil's attention to a later procedure which he did not mention in his paper and may, therefore, not have come to his attention. I refer to the operations as performed by Major H. D. Gilles which he carried out in a large number of cases in Queen's Hospital, Sidcup, England. It seems to me a very simple and a very promising operation. I will hand Dr. Weil a copy of the **New York Medical Journal**, March 16, 1921, in which is an article by Sheehan, of New York, describing the procedure and illustrating it with cuts which make it very clear. It consists in making an incision on each

side of the columna nasi from the tip to the base and then a transverse cut joining the lower ends of these two incisions. The columna is then lifted up and turned up over the nose. The mucous membrane and perichondrium on each side of the septum are then dissected up for about one-fourth of an inch to make a flap and a separator is slipped in under the tip of the nose under the skin and the necessary dissection made, either for taking out a hump or for slipping in a piece of cartilage which he thinks better adapted for the purpose than bone. The cartilage is taken from at the right of the sternum from the costal cartilages and is slipped under the skin of the nose in these cases, as the procedure is carried out for the purpose of filling out a saddle back depression. Although Sheehan's article is concerned especially with the relief of this depression deformity it is quite applicable also to the correction of hump and other deformities. As to the question of anesthesia, I believe it is quite possible to do this satisfactorily under local analgesia and I believe that this should be the anesthetic of choice in order to obviate the danger of aspiration pneumonia which might follow such procedure under general anesthetic.

Dr. E. Denegre Martin: As Dr. Weil very truly said it is within the province of the rhinologist to perform these corrective operations on the nose and I am very glad to know that they are now beginning to enter this field. It should be extended much further for undoubtedly they are better prepared to do this work than the general surgeon. It is a special class of work that I have always enjoyed but most of mine was done prior to the introduction of the newer methods, which of course, are far superior. My work in the modern field has been confined to helping Dr. Lynch in a case which he had about a year ago. I have had two cases of saddle back deformity which were corrected by a very simple method. As these deformities were not great I succeeded in correcting them by introducing a sharp scalpel under the skin in the median line and dissecting the tissues free for some distance on either side. The flaps or loose skin on either side were then advanced until the correction was made and a mattress suture put through from side to side and across the cartilage of the bone to prevent retraction of the skin. In course of time this gave an excellent result. I have also done three complete rhinoplasties with several minor deformities about the nose. I have here the photographs of a case that was interesting. This woman came to my service at the Charity Hospital as a result of a syphilitic destruction of the entire nose. The ulcers had not entirely healed but had so encroached upon the nasal opening that this was almost blocked and she breathed with difficulty. In order to prepare her for a rhinoplasty I enlarged the opening, grafted the edges and healed the ulcer.

Photographs number one and two describe the condition prior to operation. Photographs three and four show the ultimate result, and really succeeded beyond my expectations as this was only the second time that I had attempted the operation. The difficulty in this operation has always been the closing of the nares as the columna was formed by a small strip of tissue extending from the flap. The result was that the lower surface of the flap which formed the columna and the alæ of the nose contracted to such an extent that it was necessary to introduce tubes to prevent blocking and even this was unsatisfactory. Adopting the Indian method by taking the flap from the forehead it is cut pear-shaped and broader than would be necessary by the usual method. The

edges of the skin on either side of the columna are then inverted and held to the skin flap by sutures. This method lines the alæ on either side with skin and drawing the two edges of the flap together forms also an entire skin covering for the columna. In none of the three cases reported was I annoyed by the usual contracture which takes place around the alæ, the inverted skin flap entirely overcoming this difficulty. I must also agree with Dr. Weil, that whereas these operations can be done under local anesthetics, the work is not so satisfactory, especially if other deformities, such as lateral flexion exist, for it is often necessary to introduce the Ash forceps in the nares in order to reduce the deformity. This might be done by a topical application of cocaine but I believe it would add much to the shock, besides the edema resulting from the injection might mislead the operator. The nose can be easily blocked and the operation done with a greater degree of comfort to both the operator and the patient under a general anesthetic.

In Fine: Rhinoplastic surgery is a branch that has been neglected greatly by the rhinologist especially here in the south.

The results of this kind of work are entirely satisfactory and should be an incentive and spur for further endeavors along this line. Contrary to the general impression, patients do not seek corrections of these deformities for vanity, but because they are the subjects of such comment and ridicule from their associates that they become keenly self-conscious and very frequently border on a state of melancholia.

The preliminary submucous resection that Dr. Weil speaks of is not the classical submucous that we usually employ, but is a modified operation, that is the quadrangular cartilage is separated from the vomer and perpendicular plate of the ethmoid and instead of removing it entirely it is pared down and made to fit within its bony confines without bending. At times it becomes necessary to make incisions into the cartilage in order to make it straighten out properly. In cases where the lump is due to the elevation of the lower end of the nasal bones it can be gotten rid of by sawing through the nasal process of the maxilla and then filing down the process with a rasp or file until the proper amount has been removed. The nasal bones are then fractured from their frontal attachments and the elevated end can be easily lowered. This is preferable to sawing for it does not change the normal rotundity and contour of the nose giving it the flattened aspect we sometimes see after removing the humps with a saw.

The question of anesthesia is a debatable one; some men such as Tieke of New York do all cases under local while Cohen of Baltimore has given up local entirely and does all work under general. Personally I believe, for the beginner, the general anesthetic is far preferable especially where the nasal bone will have to be fractured in order to straighten the deformity.

NINETEEN RADICAL SINUS OPERATIONS (KNAPP) DONE UNDER LOCAL ANESTHESIA.*

By DR. M. P. BOEBINGER.

This monograph is undertaken, not with the idea of bringing out something new, but to report a series of cases done under local anesthesia, and also to report a technic, that of Knapp, which has given the writer his best results, thus far obtained. The author fully realizes that the last word in sinus surgery has not been written, but the radical sinus surgery that can be undertaken and done under local anesthesia, has inspired the author to publish this monograph.

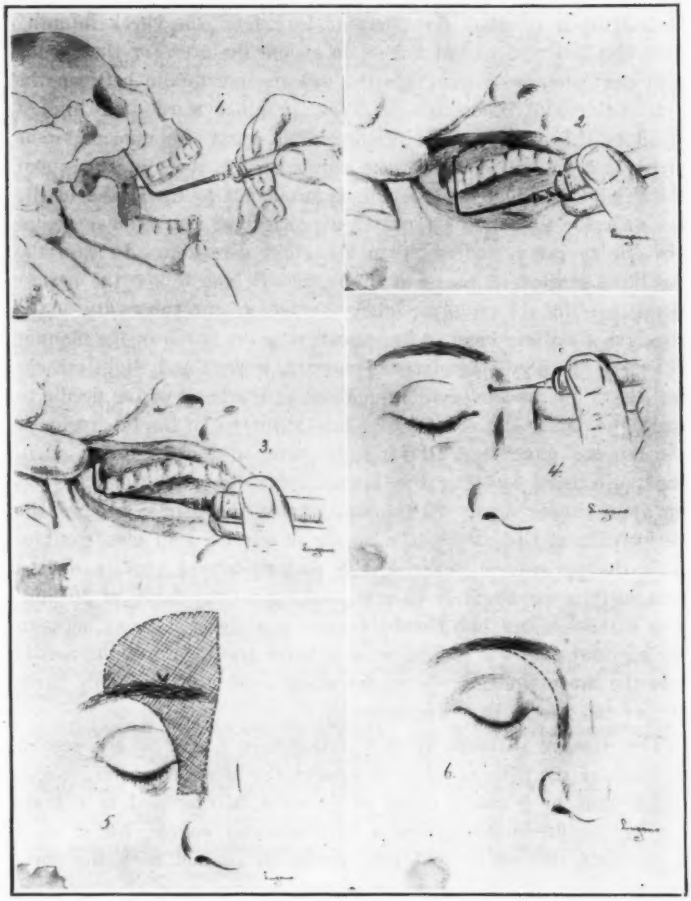
It is not possible to standardize sinus work, as we have done in mastoid and tonsil surgery. A forward step in this direction can be taken by protecting the patient from fear, pain and shock, and the operator from fear of accident that may happen when his technic is trusted to position and sensation of touch in an anatomical field that has its many variations and may be further distorted by the pathological condition. Is it any wonder that the nightmare of rhinology should be sinus surgery? Therefore let me warn you, do not sacrifice thoroughness and safety for speed. If seeing is essential to safety, then we must have our patient in a position that permits of seeing without giving both patient and operator the neck-ache, so often the result of the sitting posture. The writer always has patient placed in the semireclining position.

The blocking of the second division of the fifth nerve anesthetizes the small nerve branches which supply the structures situated between the frontal sinus and nasal cavity.

Needle employed:—The needle and extension used for this injection is of special design. (Fig. 1). The extension has sufficient curve to allow the needle to come in contact with the periosteum covering the lateral aspect of the tuberosity of the superior maxilliary bone when the hub of the extension is held midway between the occlusal planes of the upper and lower teeth. The needle is made of iridio-platinum, is 40 millimeters long, and 22 guage.

Technic of injection:—The buccal and occlusal surfaces of the upper second and third molars, gum tissue, mucous membrane, and cheek in the region of the upper second and third molar are thoroughly prepared for the needle by applying tincture iodine.

* Read before the Orleans Parish Medical Society, April 25th, 1921.



1. Showing relationship of needle to upper third molar and lateral portion of tuberosity on skull.
2. Correct position of needle and extension hub prior to injecting solution for blocking the second division.
3. Position of syringe and extension hub for blocking Meckel's ganglion.
4. The medial orbital injection.
5. Area of anesthesia secured by blocking the supraorbital, supratrochlear and infratrochlear nerves.
6. Line of incision.

The syringe should contain 4 c. c. of ½ of 1% Novocain solution and should be held in the hand pen fashion.

The operator should stand in front of his patient with the pat-

ient assuming the semisupine position. The patient's mouth should be half open to allow the operator to extend the cheek laterally with the first and second fingers to expose the area for the needle. The next step is to puncture the mucous membrane between the gum tissue and inner side of cheek, in other words, the highest point in this region. The needle should enter the mucous tissue above and to the buccal of the apices of the roots of the upper third molar. Great care should be taken not to insert the needle too near the gum tissue for such a proceedure would make it impossible to carry the needle in the right direction. In case the needle is started in the gum tissue, it will not follow the periosteum covering the posterior lateral surface of the tuberosity of the superior maxillary bone. After puncturing the tissue in the manner described the needle is advanced upward, inward and slightly backward into the mucous membrane allowing the bevel of the needle to reach the periosteum covering the lateral surface of the tuberosity at the mucous membrane allowing the bevel of the needle to reach the periosteum covering the lateral surface of the tuberosity at an approximate depth of 15 mm. After the needle reaches the periosteum at this depth, the needle is advanced in close contact with the periosteum covering the posterio-lateral surface of the tuberosity, approximately 15 mm. making a total depth of 30 mm. The extension and hub should assume a position midway between the occlusal planes of the upper and lower teeth. Force the needle into the mucous membrane as described until approximately three cm. of the needle have disappeared.

The average distance from the puncture point, to the second division of the fifth nerve as it crosses the sphenomaxillary fossa, is (30 mm. or 3 cm.) Great care should be exercised in not allowing the needle to assume a perpendicular course, for if such is the case the needle will not remain in contact with the periosteum covering the tuber maxillare.

If the extension hub is held parallel to the occlusal plane of the upper teeth while the needle is being inserted, the needle point will strike the inferior lateral portion of the greater wing of the sphenoid bone, other lateral portion of the external pterygoid plate. If this has been done, the needle should be withdrawn and the correct technic employed. The route followed by the needle is void of large arteries, veins and nerves, as the needle passes along the periosteum covering the posterior lateral tuberosity of

the superior maxillary bone, it is located anteriorly and laterally to the posterior superior alveolar nerve and artery, as they enter the posterior superior alveolar foramen.

Technic for blocking the sphenopalatine, (Meckel's) ganglion:—A special needle is employed for blocking the ganglion. It is the same as the one employed for blocking the second division of the fifth nerve by the intraoral method, with the exception that the nedle is 5 mm. shorter, this making the needle 3½ cm. in length. The hub is 4 cm. in length, and has a curvature sufficient to allow the needle to pass over the tuberosity in the right direction. The syringe is held in the hand pen fashion, the needle is inserted into the mucous membrane distal to the upper third molar, or, in other words, distal to the tuberosity of the superior maxillary bone. The needle is advanced upward inward and backward to an approximate depth of 2½ cm. When the solution is injected the point of the needle should be at the sphenopalatine ganglion which is located from 5 to 7 mm. beneath the second division of the fifth nerve and midway between the posterior part of the tuberosity of the superior maxillary bone and the anterior surface of the greater wing of the sphenoid bone. The hub and extension of the needle rests upon the occlusal plane of the upper teeth. The approximate depth of the needle is 2½ cm. The needle employed being 3½ cm. in length; 1 cm. will remain exterior to the surface mucosa.

This injection will block the sphenopalatine ganglion and its branches. (Fig. 3).

Median orbital injection for blocking the anterior and posterior ethmoidal nerves. (Peuckart Route).

This deep injection, which is made on the median side of the orbit blocks the ethmoidal nerve branches which supply the anterior and posterior ethmoid cells, the sphenoidal and frontal sinuses and mucous membrane of the cribriform plate of the ethmoid bone. Branches are also distributed to the cartilage and skin of the tip of the nose. Branches also supply the superior and anterior parts of the nasal mucous membrane with sensation, and also supply the superior and middle turbinates.

Before covering the technic, the necessary landmarks will be given.

If a horizontal line (Fig. 4) is drawn along the inner wall of the orbital cavity extending from the optic foramen to the root

of the nose, it will be found that this line passes through the anterior and posterior ethmoidal foramina.

Technic for Median orbital injection:—After treating the skin aseptically, the field is painted with tincture iodine, the nerve blocking needle is now employed, which is 22 gauge, and 60 mm. long.

The puncture point is located on a level with the root of the nose, (Fig. 4) and the needle is in contact with the periosteum covering the inner orbital margin. The needle is forced through the skin, striking the inner orbital margin, holding the needle in both a sagittal and horizontal plane. It is now forced backward along the inner wall of the orbit at the junction of the upper and inner walls, care being taken to keep the point of the needle in contact with the periosteum. The approximate distance between the inner orbital margin and the anterior ethmoidal foramen is 2 cm.

Structures Anesthetized:—The blocking of the anterior ethmoidal nerve will anesthetize the mucous membrane lining the anterior and superior parts of the nasal fossa; nasal septum; anterior inferior part of the nose; anterior half of middle meatus and middle turbinate bone; anterior half of the inferior meatus and inferior turbinate bone; anterior lateral part of wall of nasal fossa; anterior ethmoidal cells; and frontal sinus.

Blocking the posterior ethmoidal nerve:—After injecting the solution to block the anterior ethmoidal nerve, if it is desired to also block the posterior ethmoidal nerve, the needle is now forced 1½ cm. farther posteriorly along the medial wall of the orbit. The average distance between the anterior and posterior ethmoidal nerves, as they pass out of their respective foramina, is one and a half (1½) centimeters; the distance from the inner orbital margin to the anterior ethmoidal nerve is 2 cm; and the distance between the two foramina is approximately 1½ cm; therefore, the total distance which the needle is inserted to block the posterior ethmoidal nerve is 3½ cm. Precaution:—Great care should be exercised not to insert the needle too far posteriorly in view of the fact that the optic nerve, as it emerges from the cranial cavity through the optic foramen, is on a direct line with the needle. The average distance between the optic nerve as it enters the orbital cavity through the optic foramen and the inner orbital margin is 4 cm. The needle should not be inserted to a greater depth than 3 cm. so as to make sure that it does not enter the region of the

optic nerve. The posterior ethmoidal foramen is located from 3½ to 4 cm. from the inner orbital margin, but inasmuch as it might prove a dangerous procedure to insert the needle into the region of the optic nerve as it passes out of the optic foramen, it is therefore advisable to make the maximum depth 3 cm. Even if the injection is made anterior to the posterior ethmoidal foramen, the solution will reach the posterior ethmoidal nerve by infiltration and will produce the desired result. The anesthetic content itself will act upon the optic nerve, but its effects are only transient. Never use adrenalin Chloride solution in this region because the vaso-constriction may produce anemia of the optic nerve.

Time to wait for Anesthesia:—Anesthesia is produced in from five to ten minutes in the frontal, ethmoidal, and sphenoidal sinuses. The time required for the solution to thoroughly permeate the epineurium and the second division fibres is from ten to twenty minutes, therefore, always block Meckel's Ganglion and second division fibres first. The time required for anesthesia of the supraorbital, supratrochlear and infratrochlear nerves is three or four minutes.

Kind of solution used:—

Novocain or Apothesine ½ of 1% solution. Adrenalin Chloride is used only for supraorbital, supratrochlear and infratrochlear nerves and the region of the frontal sinus.

The combined blocking of the supraorbital, supratrochlear and infratrochlear nerve:—The face and unshaven eyebrows are cleansed with alcohol and tincture of iodine applied to the field of operation prior to anesthesia.

The supraorbital, supratrochlear and infratrochlear branches are then blocked. The entire anesthesia about the frontal sinus, region of inner canthus and lower portion of nasal bones should be done with a single skin puncture, with a two inch needle, withdrawing the needle just far enough to inject each succeeding area, but not withdrawing it entirely out of the skin; should the operator make multiple punctures he defeats his own end by producing several outlets during anesthesia.

The average distance between the supraorbital and supratrochlear branches at the point of injection is approximately one cm; therefore, if the solution is injected midway between the two points as they pass upward and over the supraorbital margin it will only

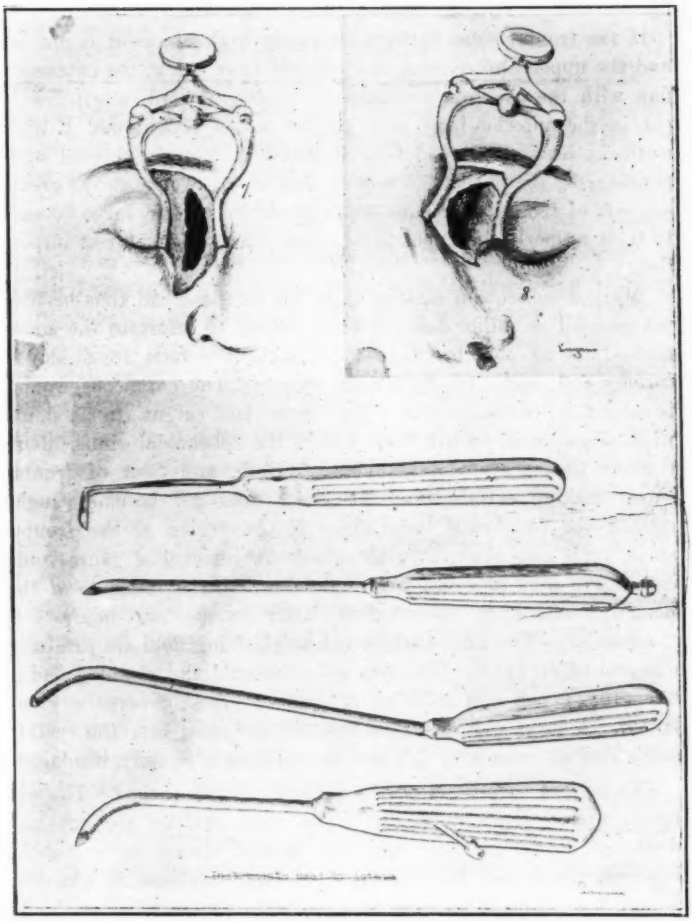
have to infiltrate a distance of 5 mm. laterally and medially to block the respective branches. (Fig. 5).

Incision:—The operative field and patient are now dressed and eyes protected. A one and one half (1½) or two (2) inch curved incision is made (Fig. 6) through the unshaven eyebrow, beginning to the medial side of the supraorbital nerve and curved down the side of the nose almost to the inferior end of the nasal bone, it is necessary to avoid injury to the supraorbital nerve which might result in paresthesia or numbness. The incision is deepened to reach the bone. A Jansen mastoid retractor is now placed after elevation of the periosteum and control of hemorrhage the latter is profuse for a few moments but easily controlled with forceps and retractor.

The periosteum is retracted, the author using a very small hoe-shaped elevator (which was made by the Surgical Supply Co. of this City) which has served me most excellently. After the firm adhesion of the periosteum to the orbital margin is separated. the soft parts with the orbital contents and the lachrymal sac are gently detached and free access is given to the roof and the inner wall of the orbit. (Fig. 7). The pulley of the superior oblique is carefully detached from the trochlear fossa. It is important not to disturb the relation between the tendinous ring through which the tendon passes and the periosteum to which it is adherent; the periosteum later becomes attached in its normal position by the healing process and interference with the superior oblique muscle is avoided. This important relation can best be preserved by dislodging the pulley from the trochlear fossa by a blunt periosteotome working from behind forward.

(The author advises the use of the Ballenger submucous elevator).

The entire floor of the frontal sinus is then easily removed with the chisel and hammer, the diseased mucous membrane is curetted and the bony septa in the frontal sinus are carefully eradicated. A portion of the orbital margin can be removed without causing any deformity if the normal curve be preserved. The nasal process of the superior maxillary, the lachrymal bone and the ethmoidal os-planum are then resected, giving broad access to the middle meatus of the nose and to the ethmoidal labyrinth. Work in this region is facilitated by a Jansen retractor. The ethmoidal labyrinth is completely elevated with curette, forceps, etc; remembering that the anterior ethmoidal foramen which is a constant land-



7. Retraction of periosteum, working space with incomplete removal of osseous wall.
8. Complete detachment of the orbital contents and removal of floor of frontal sinus, lachrymal bone, os-planum, etc.

Below—Instruments used by author.

mark indicates the base of the skull and that as one proceeds back, the ethmoid becomes broader laterally. The sphenoidal sinus is entered if necessary. As broad an opening into the nose as possible is made, in addition to removing all disease to insure proper drainage. (Fig. 8). (The author uses a frontal sinus rasp, of

his own design, to assist in enlarging the opening.)

If the frontal sinus extends unusually high up, as it is apt to, and the upper limit cannot be curretted from below, the cutaneous flap with the eyebrow is forcibly retracted upward, a window is cut in the anterior bony wall similar to the Kuhnt and Killian methods, leaving a broad bony supraorbital margin cevered with periosteum; the purpose of this window is not to remove the greatest part of the anterior bony wall but should be only large enough to treat properly the upper parts of the cavity under direct inspection.

Marked subsequent sinking in of the forehead can thus be prevented. (The author has not been obliged to resort to the above method, being able by means of Coakley's curetts to reach all corners and angles of the frontal sinus.) The cutaneous wound is sutured with absorbable ten day chromicized catgut after a single wick of gauze is passed from within the sphenoidal sinus, along through the excavated ethmoidal labyrinth, and floor of frontal sinus, making certain that the gauze does not become caught against the roughened bony edges in the region of the frontal sinus, (this may interfere with subsequent removal of gauze), one end of the wick of gauze is brought down to the vestibule of the nostril, facilitating easy removal after twenty-four hours.

Dressing:—The wound edges and neighboring field are carefully cleansed of all blood. The eyes are uncovered and cleansed and a ten (10%) per cent solution of argyrol (freshly prepared) instilled. A large pad of sterile vaseline is placed over the eyelids and a fluff of gauze over this and the operated side, only, bandaged.

The patient occupies a partly upright position in bed. The external wound closes primarily. The nasal cavities are left undisturbed. Diplopia and epiphoria should always be expected; however, the author has not had these complications in nineteen Knapp operations, which can be described as a modified combination of the Jansen and Kuhnt methods.

The complete removal of the ethmoidal structure is also facilitated when the orbit contents can be well retracted. The elements of success in operations of this kind depend upon the use of a proper light (either with mirror or electric forehead reflector and long slender light attached to portable battery and used by writer to explore and search deep field for unopened ethmoid cells after thorough currettment), the control of hemorrhage and a thorough

working knowledge of the anatomy of the sinuses and allied parts. These should, surely, not deter the rhinologist from continuing in the development of this important field.

Summary:—The author's cosmetic results are good. No need of incision to extend outward to outer canthus, as in the Killian and Kuhnt operation. The external bandage is removed in about 48 hours and eye left uncovered, small cotton and gauze dressing held on by means of adhesive strips. Absorbable suture material having been used, there is no need for the painful removal of sutures. After removal of nasal pack, if it is found necessary, a dilator is passed into the sinus at frequent intervals and kept up until discharge ceases and convalescence about complete. The author does not irrigate, no nasal douches are permitted and recommend non-interference with wound unless absolutely necessary. No scab formation has been found in all cases and my first case extends back to August 1920.

No pain was felt by patient at any time during operation. No post operative nausea was experienced. No post-nasal packs are used, a matter of increased comfort for the patient and lessening the danger of middle ear disease from detained secretion and irritation from the gauze. Much less hemorrhage than when ether is used. All of my attempts at local anesthesia have been sucessful, at no time was the author forced to resort to etherization of patient.

Two cases still under treatment. One case gave me a little trouble with localized periostitis, which disappeared by use of ice bag. One case of cavernous sinus thrombosis gave me my only failure, patient died two months after the operation.

The essentials of success in the external operations on the sinuses are, in my experience, a thorough knowledge of the anatomy of the orbit and the accessory cavities, ample drainage into the nose from all the affected cells, or if the mucous membrane be greatly thickened and diseased, its complete removal by Killian or other similar procedure.

The rhinologist must have a thorough working knowledge of the orbit and its contents and of the danger of injury to the eye or its adnexa. The detachment of the pulley is of great importance in order to get at the ethmoidal and deeper structures properly. This feature, and the complete removal of the inferior wall of the frontal sinus, make this method easier than Killian's operation.

When dealing with a double frontal trouble, the inter-frontal septum with the complete removal of floor of the sinuses are done similar to Lathrop technic.

DISCUSSION.

Dr. Martin: I am inclined to agree with some of the speakers who have preceeded me in regard to local analgesia in extensive operations of this kind. Not only from the danger incurred, for I do not believe that any of these operations are without some risk and unless there is some special contra-indication with which I am not acquainted, I think the operation should be done under a general anesthetic. I am free to admit that frequent operations about the nose under local analgesia have made me an arrant coward and whereas there is no pain at the time, the crunching of bone and the knowledge of what is being done, probably more so in my own case as I am more or less familiar with the work, has had such an effect upon me that it has taken me weeks sometimes to recover from the attendant shock. I speak feelingly in this matter and I think that the specialist should take it under consideration. As curious as it may seem, operations about the abdomen do not leave the patient in this condition. I have taken a general anesthetic six times and each time have come out without shock, without nausea, and made a rapid convalescence, but each time that I have had to undergo an operation about the head with a local anesthetic I have been a physical wreck for some days after.

Dr. A. I. Weil: I wish to enter a word of protest against the indiscriminate use of local anesthesia and these intricate and more or less dangerous procedures of nerve block, or really not nerve block but ganglion injection, in extensive intranasal operations.

Local anesthesia is admirable in simple nose operations, such as submucous resection, turbinectomies, intranasal antral openings and the like. But when it comes to extensive operations such as that described by the reader I fail to see the advantages and am impressed with the disadvantages and dangers of the method described. There is the danger of infection mentioned by Dr. Dupuy, the danger of damage in the orbit or injury to other parts, especially when this procedure is attempted by one not so expert as the reader, from his paper, appears to be.

On the other hand, ether anesthesia is practically without danger, I believe is more efficacious and undoubtedly leads to a more efficient and thorough operation. There are doubtless certain cases, in which a general anesthesia is contraindicated, where the nerve block is of great assistance, but except in such cases I believe the advocacy of procedures of this kind as a routine measure is to be deprecated.

Dr. Dupuy: If we successfully block the second division of the fifth, and infiltrate those branches of the supra-orbital and the trochlear nerves in the skin over the frontal region, we have, I think, sufficient anesthesia to perform such surgery as is called for by the Knapp. I therefore consider the medium orbital injection as unnecessary and as possibly jeopardizing the integrity of the eye-structures.

Let me sound a note of warning, despite the plausible explanations of Dr. Boebinger, relative to the danger of infecting the spheno-maxillary fossa when blocking the second division of the fifth. This fossa once infected will lead to our Waterloo. To do this work, experience, technique, and a most scrupulous asepsis are required, hence the warning.

THE HERO DOCTOR.*

By HOMER DUPUY, A. M. M. D., New Orleans.

The Soldier-Hero surrounded by the panoply and din of war has ever been the world's darling. The Soldier-Hero is immortalized in the glowing canvas, in chiseled marble, in majestic verse and in rhapsodies of sweet sound. True it is, that the time for heroic action is often amid scenes of terror and turmoil.

In that imperial personification of force and daring we call Napoleon; in the chivalry of that white plumed knight, sans peur et sans reproche, Bayard; in the more commonplace duties of the Dough-boy and the Poilu, there runs unquestionably a strain of the heroic.

The three hundred who defended the pass at Thermopilae and rolled back the tide of Persian advance, the line of steeel which held Verdun with the transmitted magic of "Ici ils ne passeront pas", indeed these are to be accounted as heroic achievements.

But the day never dawns, the hour never strikes in which heroism of some sort may not shine forth. Amidst the clash of arms and the boom of cannon, amid the stir of martial music men do deeds of valor. There is however, a valor born of self-denial, self-sacrifice and great heartedness, which makes men and women without thought of glory or fame give themselves completely to others to better serve their fellow creatures. The arena for the display of heroic virtues is not always the noisy and spectacular battle-field. Peace presents countless opportunities for heroism.

See by the squalid chimney-side the sad figure

> "Of a woman in unwomanly rags,
> Plying her needle and thread,
> In poverty, hunger, and dirt,
> Stitch! Stitch! Stitch!
> And still with a voice of dolorous pitch
> She sings the Song of the Shirt.

Surely, there is no blare of trumpet here and yet with all such quiet, genuine heroism!

After all, the valor whose field of action is "grim-visaged war" is not of the highest order. He who serves humanity without thought of expense, health and life itself, is surely the larger and more valiant man.

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* (Annual address of the president La. State Medical Society, Meeting April 20, 1921).

If utter forgetfulness of self, if to be actuated by high motives in the performance of obscure, and sometimes distasteful duties, if to be above petty calculations and scornful of being scorned, if these constitute the true essence of heroism, then surely have the heroic elements always been at work in the medical profession.

Our calling necessarily makes us plunge with a bold spirit into those rarer dangers which sometimes beset men, and brings us in touch with the most loathsome forms of disease, it brings sounds and sights of suffering with the final vision of violent death. It is no wonder then that we too have our heroes. They lived great and exalted lives, boundless with love for their fellowmen. They toiled and sacrificed that others might live and be happy.

Is it not meet that we pause awhile during the common business of our every day life, and recall the names and deeds of our hero-doctors? Let us for our own edification and inspiration pick out some of the bright particular stars from a galaxy of great names—pathfinders they were in the field of medicine—who "left foot-prints on the sands of time."

Witness the contempt of ease and safety of a Vesalius, the Father of Anatomy. He risked the most terrible dangers in his search for real knowledge. Nothing daunted him. To secure bodies for dissection, unshaken and unterrified, the haunted gibbets and charnel houses, braving the popular fury and the virus of plague.

Witness the persecution of Harvey on account of his epoch-making discovery of the circulation of the blood. Shakespeare with prophetic vision had already made Brutus say to Portia:

> "Thou art my true and honorable wife,
> As dear to me as the ruddy drops
> That visit my sad heart."

But even the medical profession was not yet prepared to accept the great principle of the blood movement. Bitter opposition tried the very soul of Harvey. Deserted by his friends, his practice reduced to a bare living, with gaunt poverty staring him in the face, with undaunted valor, he stuck to the new truth.

Let us recall the fate of Jenner and see the envy, blame, hatred and calumny heaped upon him because he, forsooth, devoted himself to the propaganda of a strange, yet great truth, the potency of vaccination against small-pox. Undismayed by threats and

opposition the heroic in him made him stick his "courage to the sticking place."

Less spectacular, but none the less heroic, is the conduct of a Semelweis of Vienna, who, to reduce the appalling death rate from puerperal fever, took the stand that students doing pathologic work must not attend obstetric cases. The furious persecution which followed drove Semelweis into an insane asylum. He was released from his retreat, however, a well man, but undaunted and defying, returned to the attack, and thus by his valor and constancy was instrumental in the saving of thousands of lives.

Think of the self trust of Ephraim McDowell, who taking his own life and reputation in his own hands dared to perform the first operation for an ovarian cyst under the most adverse environments, by himself and in his own office. Surely, his heroism and his "paths of glory" might have led to the grave, for near by were shot guns ready for action in the event of a fatal result to the patient. The "Woman-Murderer" as he had already been called by the indignant citizens, would himself have been murdered for the courage of his convictions.

Witness the courage and untiring devotion of Pasteur who adhered to his ideal of science, without thought of applause or compensation. He suffered for his discoveries. His good faith questioned, his statistics scorned, his results laughed at, his pension from the French Government about to be revoked, he braved all these and went on with the dull, slow grind of the laboratory. The literature of heroism is richer for such an example of self-immolation.

In the record of self sacrificial acts nothing surpasses the conduct of the brave Lazear who made himself a free and willing subject to prove the mosquito transmission of yellow fever. The tragic sequel—death—was the supreme sacrifice, for he gave his life for his fellowmen. Carroll, during these same experiments, was just as heroic for he barely escaped the same fate.

But just as "many a flower is born to blush unseen", so many of our hero-doctors live a life crammed with great achievements, yet they pass on unknown to fortune and to fame. The world will little note the deeds of our many nameless heroes who, far from the "madding crowd's ignoble strife" pursue the noiseless tenor of their way, in country or in city, in slum or in cottage, always in sympathetic touch with the victims of dire poverty, painful dis-

case and horrible deformity. It is that quiet sort of heroism of a family doctor who, negligent of expense, danger, health and life itself, who braving all kinds of weather, at all hours of the day and night, oftentimes without hope or thought of compensation, answers the call to bring help to human suffering.

In all the great wars and in the devastating plagues that have afflicted mankind, countless doctors have ever shown a glorious contempt for their own safety. During these times which try men's souls, the Doctor is ever present, serene, courageous, unshaken, unterrified—in the discharge of his mission of mercy. No sculptured and emblazoned memorial commemorate the deeds of our wartime and plague-time hero-doctors, even their names have gone down to the tongueless silence of oblivion.

There are many such mute and inglorious hero-doctors, the species, while threatened, is thank God far from being extinct. Hero Doctors an extinct species? Why we have in our own day witnessed the conduct of these physicians who during the last "flu" epidemic paid such a heavy death toll for service to others. Heroes every inch were those who with the first touch of the fatal malady upon their own already weakened, worn out bodies, reckless of their own safety, went cheerfully and courageously to help others with this last, full measure of their devotion. Such heroism feels and never reasons!

Is it not well in this day, at this very hour, when some of us forgetting the high ideals of our calling incline towards commercialism, neglect and selfishness, when some of us are too ready to barter our birth right for a mess of pottage, is it not well, I say, to recall these achievements of our own heroic dead? The record of their noble life should rouse our whole being, should make us catch the finer spirit of their lofty purpose and the inspiration of their high courage. Should make us feel that we are the inheritors of this heroism of the past, and that the age of the heroic and godlike is still here. Such a retrospect should make us feel what a blessed thing it is to live laborious days for others. What a divine thing it is to perish, if need be, in bringing truth, health and happiness to others. The arena in which our hero-doctor acts is not that of aggression or strife, but it is the one of mercy, service and self sacrifice. No stars glitter upon his breast, no bejeweled sword hangs by his side, when he falls, as he often does, in the performance of duty, he falls like "The First

Grenadier of France." DeLatour d'Auvergne. The hero of many battles was killed, Napoleon ordered that his name should be called at every roll-call, and that his next comrade in ranks should answer "Mort sur le champs d' honneur"—"Dead upon the field of honor!"

"ANNUAL ORATION" LOUISIANA STATE MEDICAL SOCIETY.

By J. ZACH SPEARING, Member Louisiana Bar Association.

Mr. President, Ladies and Gentlemen:—I wish it were given me to adequately express my appreciation of the honor of saying a few words to you this evening, and the pleasure I have in doing so. There is always a compliment implied to an invitation to address any organized body, but this is very greatly increased when the request is from an organization of intelligent and cultured men and women who occupy high places as citizens. I feel particularly gratified in speaking to you of the medical profession because your members like those of my calling come into such intimate intercourse with those whom we serve. It seems to me that you and we get closer to the real human side of the people than do others. True, your relations and ours are not along the same lines, and we come in contact with different human attributes and motives.

The lawyer sees his client in the arena; in the hustle and bustle of business when he is concerned with his material affairs, where frequently selfishness is the chief, and not unusually the only, motive. The Doctor, however, goes into the homes of his patients, and comes in contact with them more in their natural state. He is admitted into the very heart of the family as no other one is. It may be he is attending a patient who is hovering on the brink of eternity and whose living means much to those who fear for the worse; or perhaps a younger life is in the balance and father and mother, and brothers and sisters, feel that he has so much to live for, and is so necessary to their happiness, and has such a bright future he cannot be spared; or again the whole family may be looking forward with the happiest anticipations to the bringing of a new life into the world with a realization of the dangers of such an event. But whether it be in one of the situations I have mentioned, or in others not necessary to refer to, the doctor is the one person who is looked up to as

capable of giving relief and of quieting the fears of those who are so apprehensive. Their emotions, their heartaches, their hopes are exhibited to the doctor as to no other human.

Those occupying that position must be of the highest class of citizenship in the community of which they are a part. And such the healer of human ills always has been, and is, and will be. It matters not whether we look to ancient times when the doctor was among the few learned men of the day; or we consider the Congoes who have implicit faith in their Voodoo doctors; or have in mind our own American Indians who reverence the Medicine Man of the tribe; or think of our present day physicians with all the advantages of our enlightened times, it is always the same, the curer of the sick and the healer of disease, no matter by what name called, is looked upon as separate and apart from the rest of humanity, and he occupies a place in the esteem and affections of the people different from any one else.

As said before, a man such as that is necessarily a good citizen. His own sense of the responsibles and a realization that he is taken as an example would prompt him to good citizenship. In fact, he cannot reach the height a true physician is entitled to and actually occupies unless he has the attributes of a good citizen.

It might be said the doctor does not usually get out on the hustings; is not often seen in political strife, and does not frequently take an ostentatious part in public affairs. His calling and the line of his work are deterrents in those respects. But they are not the only attributes of good citizenship. One may well accomplish much for the welfare and advancement of the commonwealth or the community by quietly and without show or display benefitting the people. Good citizenship is measured by results attained; not by the means employed.

Of course, the treatment of illness by one means or another is probably co-existant with the human race. The science of medicine as a system of treatment for disease and injuries was in existence for centuries before the Christian Era. The earliest known writers refer to such a system. Much—in fact very great—improvement and advancement have been made in the practice and application of medicine and particularly in surgery. The truth is that in our own time the medical profession has made greater progress than any of the other professions. Little, if any, changes have been made in the practice or application of theology or law. The

fundamental principles are the same, and such differences as have taken place are the result of natural growth.

The medical profession, however, has made great strides in medica materia and in surgery. Compare, for instance, present knowledge, learning, treatment and effect of anatomy, bacteriology, hygiene, radiography and a score of other subjects with conditions well within the memory of many of us present to-night and we marvel at the wonderful advantage of the present day generation. This is to be attributed in a very great part, if not entirely, to the ambition, if you will, and the determination of the physician to exert his full power, strength and ability to alleviate suffering in his fellow being and to improve the human race and thus benefit the world and mankind even at great risk and sacrifice to himself.

Voltaire, the noted French writer—whether he was a great one or not depends upon the point of view—very aptly, and, it seems to me, truthfully says of the doctor:

> **"Nothing is more estimable than a physician who, having studied nature from his youth, knows the proper ties of the human body, the diseases which assail it, the remedies which will benefit it, exercises his art with caution, and pays equal attention to the rich and the poor."**

Be it said to the credit of the members of your association that if any do not come within that classification, I do not know them.

Byron, in a very much lighter and more humorous vein depicts the feeling of the average person towards the doctor; he says:

> **"Physicians mend or end us;**
> **But though in health we sneer,**
> **When sick we call them to attend us,**
> **Without the least propensity to jeer."**

But the sphere of his activities is not confined to the limits indicated in those references. The spirit heretofore adverted to was shown in a marked degree in the World War so recently ended. Partly, from the thirst for knowledge, and, in no small degree, prompted and impelled by the desire and determination to assist and help diseased, wounded and suffering fellow beings the medical profession, probably in greater proportion than any other that went into that conflict and not only made great material sacrifices at home but surrendered comfort, ease and family ties to occupy positions of imminent danger. The knowledge, learning and experience will benefit the human race in an infinitely greater ratio

than any temporary advantage, material or otherwise, which it is possible for the individual physician to enjoy.

If, then, as seems conclusive to me, the physician is a good citizen in every respect it naturally follows that the State owes him the duty of encouragement and protection. He and his profession should be so treated that he will at least have the incentive to continue in the laudable work he has in hand and in the advancement in medical science which is so beneficial to the human race. The profession should be freed from the quack and his existence made impossible

The individual should be protected in what I assert to be the right to earn a livelihood by his personal learning, ability and exertions without being taxed, in the form of a license or otherwise, for the privilege. It is the rankest injustice and imposition, little if any, short of a crime that you and members of the profession of which I am a member, and others should be taxed for the privilege of earning daily bread by personal exertions. It is hoped that the constituted authorities will soon realize how unjustly is such treatment.

But that has not deterred, and will not prevent, you from doing your full duty, and pursuing your efforts to benefit, help and improve mankind. Those who are actuated by high ideals and lofty motives do not tolerate interference, nor do they permit even injustice to interfere with or impede their progress. It therefore follows that come what may the physician is and always will be in the front rank of good citizenship.

CORRESPONDENCE.

University of the Philippines. Department of Pathology and Bacteriology.

Manila, P. I., March 28, 1921.

Dr. Charles Chassaignac,
Editor, N. O. Med. & Surg. Journ.

I am led to write to you by two considerations. The first is an urge to express to you my sorrow at the death of Dr. Dyer, whom I have reason to remember very gratefully for having helped me to carry on as a student at Tulane. At the same time I would wish you continued success in your efforts to keep the Journal in the place among American State medical journals that its senior-

ity entitles it to. The second consideration is the invitation that I have just read in the February number to send in news items, etc. Of course, the invitation was to members of the state and parish societies, but as an ex-member I hope that I may be included.

Concerning the meeting of the Far Eastern Association of Tropical Medicine to be held in Batavia, August 6 to 13, it seems worthy of note that this meeting was to have been held in 1915. Since that time the Association has been all but defunct. Though it was conceived by Americans in the Philippines and organized in Manila in 1908, there is at present unfortunately little interest or general knowledge of it here. As in the English and French Oriental territories, the years have seen great changes in local personel. At present there is no officer of the Association in the Philippines, both of those elected at the Saigon Congress in 1913 having gone to the States, and practically all of the Americans who were active members are now scattered far and wide. Yet not a few of these are doubtless interested in the Association, and if the matter were brought to their attention, some would probably aid in the revival that the Dutch are trying to accomplish by at least renewing their memberships.

Though it is provided that anyone who fails to pay the annual dues for two years shall be dropped, and that to be reinstated he must pay "all his dues", there seems to be no intention to apply that rule to cover this period of inactivity.

Leprosy treatment has naturally interested the health authorities here of late, and a committee appointed by the Director of the Philippine Health Service last year has been testing out the Rogers preparations (gynocardate and morrhuate) in comparison with the Mercado formula that has long been the official treatment here. Subsequently the Hollmann-Dean preparation was included in the tests. The results have been so encouraging that we prepared a plan calling for the appropriation of P600,000 ($300,000) to apply one or another of the newer methods to all of the 5000 lepers on Culion Island, and at the same time to carry on intensive research on leprosy and its treatment. The bill was finally slated for postponement, but at the last moment we succeeded in getting an appropiation of $100,000. It is believed that this can be so used and indirectly supplemented as to enable us to make a good start toward the desired end.

You may be interested to learn that the Manila Medical Society,—which is as yet the only component society of the Philippine Islands

Medical Association—decided last year to start a clinical journal for local use, "The Journal of the Philippine Islands Medical Association". A copy of the first issue will be sent you shortly, with an invitation to exchange.

Hoping that this rather lengthy epistle may have something of interest to you, I am

Yours very truly,

(Signed) H. W. WADE.

PROCEEDINGS OF THE STAFF OF TOURO INFIRMARY

(HELD AT TOURO ON APRIL 13, 1921.)

DR. J. N. ROUSSEL. Mr. Chairman and Gentlemen, I neglected to bring the history card of the patient along. I am sorry there are no other cases because I would like to have seen them apparently cured at least. In 1918, I saw an abstract in the *American Medical Journal* from a South American Journal on the use of Anthrax vaccine in Leprosy. Dr. Johns sent to the Surgeon-General's office and proceeded to use vaccine on two cases. They both got very much worse after its use and the article in the journal had not stated what happened to them immediately after its use. These patients became so much worse that I recommended that they go home, after which I saw them no more. I saw them last in April 1919 at which time they were very much worse. In December of the last year one came to my office as she had another trouble and when I asked about her other trouble, she stated she had been WELL for a long time; there was nothing the matter and she felt perfectly well. There was no anesthesia. After looking all over, I could find nothing the matter. I then wrote to the other case, which was a tuberculous type, and she told me the same story about having gotten well in June. The first was a maculo-anesthetic type, and I am showing this case because I think it is more interesting than the others. This maculo-anesthetic type had circinated, raised patches; face suffused—red all the time. The whole surface was suffused. In January, I injected twice; pneumonia developed after the second or third injection. After she recovered from pneumonia, another injection was given and the lesions that formerly had been large patches changed to large nodular lesions, typical of erythema nodosum; sharply limited, firm and dense. After another injection, she had other lesions which

looked like a big carbuncle and bullae formed on all of them. In a week or so, they dried up, peeled off and the result is that there is nothing to be seen—nothing but a few stains that you would get from a boil—nothing of the macules.

I want to say that we use the same vaccine that is used in veterinary practice—what the Biological houses call "Liquid Anthrax Vaccine." We give the same dose as to a horse. I started with a ¼ cc. and went up to one cc. apparently producing very little reaction. The temperature is slightly raised after injection and rapidly disappears. I have been using the vaccine probably oftener than we find it necessary to use—only two or three injections may be necessary; we vaccinate a horse only twice. There are four types of vaccine. (One has been taken off the market because too many animals were killed by its use). I asked Mulford to send full data as to how to manufacture it but they have not yet done so. It is too soon to tell how the other cases on which I used this vaccine are progressing. Somebody suggested this was possibly an "erythema nodosum." At the time, it probably was an erythema nodosum. She has had Leprosy for years. There is no question as to what the others had. Bacilli were found. Whether the bacillus is paramount we do not know. In more than 50% of the cases the bacillus is not found. (We have made our diagnosis since the time of Moses without the microscope.) Major Denny came to see these cases and they are going to use the vaccine at the Leper's home.

DR. MATAS: Are there any cases in the Leprosarium in which the bacillus has been found?

DR. ROUSSEL: Yes, nearly all of them. They would not take them without it. As to the transmission of leprosy—it is not inoculable and not transmissible. (73 authentic cases). Leprosy has never been produced from man to man. There is no question in the world but that the bed bug is the only and sole means of transmission of leprosy. It is a house disease. Gregarious bed bugs! They are never carried by natural agencies. There are instances in towns where the head of the family has had leprosy and not one in the family contracted it. In Patterson, in three or four families, the head of the family had leprosy and there was a horde of children but not one contracted it. The head of that family lived in a small outhouse, yet he dined with them and mingled among them but DID NOT SLEEP with them.

DR. PARHAM: How does the bed bug carry it?

DR. ROUSSEL: The bed bug must bite a leper. It is not contagious. I never pay any more attention to it than if it were eczema and I believe the Sisters at the Leper's Home would have it if it were contagious. There is no evidence of where it is contagious. It is a crime against civilization to lock them up.

DISCUSSION.

DR. F. M. JOHNS: I remember quite distinctly when Dr. Roussel first became interested in this subject by reason of an article that came from South America in an *A. M. A.* abstract. I procured the original from the Surgeon General's library and had it translated. It was entirely indefinite in dosage and the kind of suspension used, but simply stated that a number of cases had been treated with Anthrax Vaccine. There seemed to be no question in the author's mind but that a large number of patients had been absolutely cured. Dr. Roussel got busy and sent over four or five patients to me for laboratory examination. I found several with organisms. The worst cases were placed on treatment. While it is pretty hard to place any biologic connection between the cure by the anti-bodies formed by anthrax bacilli in the leprous lesions, the results that he has here in actual cases are simply astounding.

The method of making this vaccine is that of attenuation, simply by growing the organism upon certain culture media upon which the organism loses its power to grow within animal tissue. Typhoid bacilli, for instance, grown on culture media for many years, lose their ability to grow or reproduce in living tissue. Bouillon cultures of typhoid by the billions were fed by some college professor to his family. The vaccines given by Dr. Roussel are simply living cultures of anthrax bacilli so attenuated that they do not kill test animals. I believe only the worst cases should be given these live cultures first, as in actual veterinary practice a horse occasionally succumbs to an injection.

DR. LANFORD: I examined smears from the last case and found organisms, morphologically B. leprae occurring in a form in which we recognized considerable degenerative changes and which were without doubt leprosy bacilli.

DR. F. W. PARHAM: I would like to ask Dr. Roussel about the incubation period. I thought the period was very long. There might be difficulty in determining whether or not it is contagious on this account.

Dr. J. N. Roussel: I would like to answer Dr. Parham's question. I do not think the question of incubation of leprosy has ever been settled. Some patients say they have only seen these lesions during the last few months. Then they will say "O yes, last year," and finally, I find they have had it four or five years. Whether it is long or short nobody knows; until we can find the mode of transmission, we will never know. I think we have to find some other way of treating leprosy besides Chaulmugra Oil. It was used in the United States about 120 years and I understand the general impression in India is that it has been used for 4000 years. I think it ought to be relegated to absolute obscurity, and it is a crime to use the ethyl esters. It is most painful. I won't use it on anybody anymore. Whether Anthrax vaccine will do what I think it will do is the question. This patient shown is probably not entirely well. The other patients took over six months. They have been apparantly well—clinically—over two years. Leprosy is not often spontaneously cured.

One case which Dr. Van Wart sent me was of a nerve type; absolute anesthesia. After the first injection given her, I told her to report to me exactly what happened. She said she had a chill, little fever which did not last long. Said "my hands have been on fire ever since. "I have had my hands in water and they are on fire." Something evidently awakened them. She burned her hands on the stove. The nerves are apparantly not destroyed. I have seven cases now under treatment. I will be able to tell you more later.

Dr. Matas: I cannot resist saying something after the important statement made by Dr. Roussel. Any statement regarding the cure of leprosy which has yielded such extraodinary results in his hands, cannot be passed by in silence or treated with indifference in this community. The history of leprosy in Louisiana is too well known to be insisted upon. The people of Louisiana are more deeply concerned in the control of leprosy than the citizens of any other state in the Union, and any mode of treatment or cure that promises more certain results than those already in vogue, must command the immediate attention of the profession and the public. Without attempting to discuss the relations of the new cure of leprosy by injections of anthrax vaccines which appear, thus far to be based upon purely empiric experience and not upon any known bacteriologic or scientific foundation, we are faced with

the mere fact that a certain number of clinically well authenticated and unmistakable cases of leprosy have been symptomatically relieved, in an extraordinarily short time, of their most characteristic lesions and leprous manifestations. While the bacteriologic proof of the specificity of these lesions by the demonstration of the Hansen bacillus is lacking in most of them, I would not hesitate to accept the diagnosis of leprosy as correct on the simple clinical evidence when this was recognized as unmistakable by an expert so familiar with the disease, as Dr. Roussel. Granting the correctness of the diagnosis, the remarkable improvement, practically amounting to a symptomatic cure of these patients (all advanced cases), following promptly after the injection of the anthrax vaccines, is in itself a fact which commands attention. This is the more interesting as no other treatment was given these patients apart from the vaccines. Unfortunately the number of patients thus treated is limited to three and of these, only two have been able to appear before us tonight. Judging by the clinical histories, these two patients show extraordinary improvement since the anthrax injections were given. It cannot be said, however, after examining them, that in either case, they are absolutely free from the disease as there are still relics or leprous stigmata which remain and have not been completely effaced. The local improvement and general relief is, however, phenomenal, and, from this point of view alone Dr. Roussel is entitled to every encouragement and to our hearty congratulations. If similar results could be obtained and demonstrated in a large number of well authenticated cases,—bacteriologically and clinically leprous,—and it was proven that such results invariably followed the anthrax vaccine inoculations, and furthermore, that the cure should prove permanent, i. e. that the patients remained free from all the manifestations of the disease for a long period of observation, say two or three years, we would be fully justified in claiming for this treatment one of the greatest achievements of our time,—the momentous problem of the eradication of leprosy would be solved.

But the history of leprosy warns us to be cautious in committing ourselves to hasty generalizations based upon a few isolated or limited number of observations which, no matter how striking, suggestive, or encouraging, have not been subjected to the rigid tests of prolonged scientific scrutiny in the centers of the infection where large numbers of the victims of the disease are congregated

and kept under surveillance. It is only in such centers of segregation that critical collective investigations can be carried out during long periods of time. Such conditions exist in the Leprosarium or Lepers Home in this state. The facts presented so earnestly and impressively by Dr. Roussel are quite sufficient to justify the Government Authorities in charge of the leper colony, in making a serious effort to determine the value of the new remedy. We know that great improvements in the treatment of leprosy have been claimed for various agents and yet in the end they have proved disappointing. More recently, the ancient therapeutic claims of Chaulmoogra oil have been revived for its derivatives, the ethyl esters of the fatty* acids of this oil, but I doubt that any of the cases reported cured by the Chaulmoogra esters could show a greater or as quick an improvement in the same period of time as that shown by Dr. Roussel's cases treated with anthrax vaccines. Medical history in general and the history of leprosy in particular, has made us wary of over enthusiam; only time with a large added experience can safeguard us against premature and fallacious conclusions.

In the meantime, let us hope that Dr. Roussel will continue his interesting observations and that the results of his further experience may confirm the success thus far obtained.

In reporting his success with anthrax vaccines, Dr. Roussel has brought the old debated question of the *contagiousness* or *non-contagiousness of leprosy*. This, of course, is of great and crucial importance from the sanitary and hygienic point of view, as it is upon this that the segregation of lepers is based. If the curability of leprosy by any specific remedy could be absolutely demonstrated the problem of contagion or infection would sink to a secondary plane and would be shorn of a great measure of its importance, as the eradication of the disease would be certain. As the matter stands, the segregation of lepers must remain a thoroughly justified obligation on the part of the sanitary authorities of all countries. Practicing all my life in this community, where the opportunities for observation have not been lacking, especially in the earlier years of my practice, when lepers were not subjected to sanitary surveillance or restrictions, I have been impressed with the facts that have come under my observation. These

* See Dr. J. T. McDonald's report on the treatment of leprosy with Dean's derivatives of Chaulmoogra oil. Apparant cure in 78 cases at Kalihi Hospital, Honolulu, H. I. *Jnl. Am. Assn.* Nov. 27, 1920.

have impressed me, as every one else who is familiar with Leprosy and the literature of the disease, with the immunity enjoyed by the vast majority of individuals who come in contact with it and are exposed to the effects of this infection.

In 1878 and 1879, when I was an intern at the Charity Hospital, there was a ward devoted exclusively to Lepers and there were always 10 to 15 beds occupied by leprous patients in all forms and stages of the disease. It was a very common thing for the interns to visit this ward to examine these patients and to study the disease. I was especially interested, and frequented the ward a great deal. I took copious notes and made minute examinations is I intended to write my graduation thesis on the subject; but as I became better acquainted with the subject, I found the literature so vast that I gave up the attempt as it was too big a task for my limited time and capacity. Even more than the interns, the sisters and ward attendants mixed up with the patients constantly as there were no particular restrictions imposed upon any one except that the Lepers were all housed in this ward. To my knowledge, none of the sisters, interns, or other attendants ever contracted the disease, except an old Italian priest, Father Boglioli, who for years had been the hospital chaplain. He had given much of his time and attention to these patients, in fact he practically lived with them. He contracted Leprosy and he was the only one who developed the disease in the hospital. He lived a number of years and finally died of a leprous laryngitis with the most typical and generalized manifestations of the mixed tuberculous and anesthetic types of leprosy. In the incipiency, and while the diagnosis was in doubt, he continued to minister to the other patients of the hospital without restriction. I knew him well, and he was a fine, selfsacrificing and noble character, who was faithful to his duties and his ministry to the last. He was a true martyr and deserves all the praise that was given to that world known and now historic character, Father Damien, who sacrificed his life to the lepers at Molokai. Father Boglioli was a man in apparent good and robust health before he entered the service of the Charity Hospital. There can be no doubt that he contracted the disease through contact with the lepers at the Hospital. His mode of life, food, and surroundings were those of the people in his environment, and yet he alone contracted leprosy and died from its effects. Now why should he have been selected as the victim of

the disease among the hundreds who were exposed to the same infection and enjoyed a complete immunity from its effects?

Evidently there was something in his physical make up that differed from his associates and fellow workers; something, an unknown x— that predisposed him to the disease.

Dr. Roussel has suggested, as others have, that there is an intermediary host, which acts as the transmitting agent, like the mosquito in malaria and yellow fever, or the louse in typhus; but why should an infected bed bug or louse single out one out of a hundred of individuals who with infinitely more reasons were exposed at the hospital to the bite of similarly infected parasites? Evidently this is an explanation that does not explain.

I remember another case, that of another leper, the son of an Italian fruit vendor, who kept a shop on Common Street (near Tulane Ave.) which provided fruit daily to hundreds of medical students at the lunch hour, when we travelled at noon, the familiar road from the Hospital to the old University. I, and others, had noticed the extraordinary appearance of the boy's face for some years before we realized that he was a leper and it was only when he was mutilated by the loss of his fingers and by other hideous marks of the disease that he retired from this shop and finally died in the same house, surrounded by his family and large gathering of friends. Yet his parents, brothers, sisters, and other immediate relatives who were housed in the same narrow and crowded quarters never gave evidence of leprosy, nor did I ever hear of any case of leprosy which had developed among the medical students who frequently bought fruit in his shop. This is one of the hundred of instances of a similar character which can be quoted from the immense literature of leprosy. All that we learn from this is that the vast majority of civilized mankind are immune to the disease, that only some and relatively few, are predisposed to its effects. It is in this immunity that we of the modern period of history differ from our European ancestors of the middle ages. With the return of the crusaders from the East, Europe was overrun by leprosy and lazarettos for the lepers were founded and established everywhere, which, at that time, had assumed the character of an epidemic disease. In the course of centuries, the population of Europe seems to have become relatively immune and leprosy has remained active only in a few isolated zones or areas where it still prevails—as in Brittany, in Sweden and Norway,

Ireland, Southern Spain (Grenada) Portugal, Greece, and Turkey—where in certain spots—the inhabitants still furnish pastures where the Hansen baccillus may thrive. Epidemiologists tea h us that the great plagues of humanity have their periods of activity when they attain the maximum of virulence and their periods of decline ending in virtual extinction when the masses have been immunized to the effects of the virus by constant filtration through successive generations of individuals who have survived its effects. This is the case of leprosy as it was in Europe in the middle ages. Only the primitive races or aboriginal people who first come in contact with the disease are now ravaged and suffer as the older peoples suffered in the earlier periods of their history. The same may be said of measles, scarlatina, small pox, tuberculosis, etc. which decimate and attack with fearful mortality the native populations in lands which have been long isolated from contact with the European races and civilization.

The immunizing or at least attenuating effects of age upon the virulence of the great contagious diseases is notably illustrated by syphilis. We do not now recognize the syphilis of today as the syphilis which invaded Europe at the close of the middle ages as it stalked all over Europe after the Siege of Naples coincidently with the discovery of America in 1492. The treponema then found its chief pabulum in the externals of the body and in the peripheral organs, in the skin, bones, mucous membranes, where it spent its fury, causing the hideous eruptions, ulcers, and deformities which have given syphilis its most legendary terrors. Then the disease ran a comparatively short course, melting the tissues into pus with so much rapidity that it came to an end, with death, long before the central organ of the nervous system were reached. Now we scarcely see these monstrous medieval types of external syphilis. The skin and underlying tissue and the skeleton have been in a measure, immunized and a new type of syphilis—the neural and visceral type—the 20th century syphilis,—with all its occult and more deadly manifestations (paresis, tabes, aortic disease, aneurism) has come to take the place of the syphilis of the 14th century.

How are we to account for these modifications in type, their attenuations, and the relative exhaustion of these, at one time, most aggressive and widely diffused contagions?

We can only account for these changes by the gradual, but progressive immunization of the surviving races especially those that have

survived the hereditary contagion—like syphilis and leprosy and even tuberculosis. Someone has said that syphilization travels hand in hand with civilization, and this is no doubt true, in a great measure, of leprosy. The transmissibility of leprosy and its contagiousness in the sense of communicability, cannot be denied. But it differs from other contagia in the fact that the vast majority of civilized mankind has been immunized to its effects, and it is only here and there in isolated spots over the globe, that the bacillus of Hansen finds a soil that is fit for its growth. Thousands may be exposed to the seed, may carry it in their persons, but few, very few indeed, are fit culture media for its growth. Therefore, as long as we cannot differentiate the immune from the non-immunized segregation is in order.

DR. GESSNER: Has leprosy not been attributed to eating fish?

DR. MATAS: Yes: this was Jonathan Hutchinson's theory, because leprosy has persisted in seafearing and sea girt countries,—but this has been long refuted,—for instance, Grenada, in Spain, where leprosy has existed since the moorish invasion, is not a seafaring or fish eating country.

DR. L. R. DEBUYS: I am disappointed that I have not the other case to make the group of four which I had expected to present tonight. The other case showed *craniotabes* one of the symptoms of *rickets*, the bones of the head being almost as thin as paper. The case did not come. It is difficult to get children to these clinical meetings, first, because we send out from the ward our cases as soon as they are over their acute condition, and second, because it is not easy to have them brought here at night at the hour of these meetings.

Case 2. This boy shows the interesting symptom—**Hutchinson teeth.** We need say nothing more about that as you know what it means. I take this opportunity to show you one of these cases presenting this late manifestation of **congenital lues,** simply as a reminder. An interesting thing in connection with this case is that there are several children in the family and our records show that we treated all the other members in infancy and early life, but this is the only one who was not brought to us. He shows this interesting feature while none of the other members of the family do. Another feature in this case is that he is now in an inactive state. His Wassermann is negative. He does, however, show a very marked Luetin reaction, so he shows this other interesting observation.

Case 3. Another case I wish to present tonight is a particularly typical one and I am going to select the term of "**Mongolism**" instead of one of its synonyms in speaking of her. This case has been under our observation for quite a long period. She was first brought to us in July, 1917 when she was one year and ten months old because of her inability to walk. In the history it was stated that the mother had gone past term, the pregnancy being one of eleven months. Had always been a mouth breather. When first seen she had no teeth. Examination showed the child to have a typical mongolian expression, a brachycephalic head, eyes close together and slanting, epicanthus present, a heart murmur, rather typically shaped hands, the little finger hardly reaching the middle of the ring finger and being curved inward. There was no umbilical hernia. The diagnosis at that time was "Mongolism" **(Mongolian idiocy.)** Her Wassermann was negative as was also her Von Pirquet. She was late in talking and could only say indistinctly "mama" "papa." While she was chubby and fat, there was no suspicion of her being a cretin. Radiologically her bony development was negative. She is the fifth child in the family. It is noteworthy that at the time of her birth her mother was forty years old. These cases are frequently spoken of as "reproductive exhaustion products," and are to be found as the last child in a large family. There is a poor and defective development of the brain in this condition. There is a predisposition in these cases to bronchial and acute pulmonary disturbances; she had had several attacks of pneumonias. As you can see, she is very late in talking and much below par mentally.

Case 4 is noteworthy as it presented a feature that we should always bear in mind. The child is three years old, a native of Mexico. He was admitted into my service on December 30th, 1920. Family history was negative. There is really nothing of interest in his past history. The history of the present illness is as follows:

On the 28th of December, he ate some salmon, hard boiled egg and pie for supper about 5 P. M. The next day he had temperature of 100 3/5 degrees F. (rectal), was fretful and apparently had pain in his right abdomen as he held his body continually to one side. A physician was called and gave Castor Oil and suggested that the child had appendicitis. Two enemas were given with fairly good results but the baby continued in great pain, was fretful and cried a great deal.

Apparently suffering from pain in right abdomen. There was no nausea and no vomiting. Maximum temperature on that day was 103 degrees F. Physical examination showed patient to be a fairly well developed and well nourished male child, cheeks flushed, apparently depressed, skin hot and dry. Respiration 32 and not labored, temperature 103 4/5 degrees F. (rectal). Mouth negative, pharynx very red, ears negative, pupils negative, abdomen slightly distended. No rigidity. Apparent tenderness on deep palpation in lower right quadrant. I was unable to confirm this. Liver was negative. There was nothing of note in the nervous system. I could find nothing in the thorax. The patient, however, did have a respiratory grunt, jerky respiration and movement of the ali nasae though there had not been much cough. The examination of the urine showed nothing abnormal. The blood examination showed a total white count of 35,850 with an 82% neutrophile count. The patient was sent to the ward with a tentative diagnosis of pneumonia. This was later confirmed by the X-ray. We found a small patch in the right lung. Daily observations were made with the X-ray. We

saw the patch grow larger and finally disappear. Dr. Samuel will describe the plates showing the evolution of the pneumonia. I regret that we did not take a blood culture on the first night as the culture made later was found to be negative. Dr. Lanford later made some serologic observations upon the blood which he will tell you about.

The clinical observations in this case are not very unusual in pneumonia in infancy. The typical physical chest findings not being shown until the consolidation extends from the surface to the hilum. There is a definite lesson to learn in connection with the case; namely, that in a sick child with a jerky, rapid respiration, respiratory grunt, and movement of the ali nasae and cough, it should be required of us to *exclude* rather than to prove the existence of pneumonia.

DISCUSSION.

DR. LANFORD: I would like to say something about the blood work done in the case. Serum was obtained from this case about ten days after the patient was free of fever and we tested this serum for specific immune substances using known types of pneumococcus. We were able to rule out by means of the precipitin test and agglutinization test, types one, two and three and several varieties of the type four pneumococcus, so that our conclusions—rather our results—were negative as far as the known strains of pneumococci were concerned. This, however, does not prove that the case was not one of pneumonia due to the pneumococcus because we know that the pneumococcus of the type four is composed of large numbers of varieties and we would have to have a great number of different strains to test this serum against.

From the clinical findings, and X-ray pictures, it certainly appears to be one of pneumonia and despite the negative serum reactions, I am inclined to believe that the diagnosis of pneumonia is correct.

DR. DEBUYS: Just another word. We believe all lobar pneumonias to be due to the pneumococcus. Here we have undoubtedly a lobar pneumonia though we have been unable to place the blame on any one particular strain of the pneumococcus. It is possible as Dr. Lanford has said that it may be due to one of the strains in group IV. It is unfortunate that we did not make a blood culture the first night the patient was seen as it may then have been positive.

(To be continued.)

PROCEEDINGS
LOUISIANA STATE MEDICAL SOCIETY

REPORT OF THE HOUSE OF DELEGATES TO THE GENERAL ASSEMBLY, APRIL 21st, 1921.

The House of Delegates begs to report that four meetings of the House were held, April 19th, two; April 20th, one; and April 21st, one, during which all business of the society was transacted. The minutes of the various meetings of the Executive Committee held during the year, were approved.

The report of the President, Dr. Homer Dupuy, was given. The following three recommendations contained in his report were unanimously adopted:

1. The abolition of physicians license tax. In this regard, a special committee appointed by the Chair, at the recommendation of the House, drew up a set of resolutions which were sent to Hon. M. H. Carver, Chairman of Taxation Committee, Constitutional Convention, in regard to same.

2. That it be the sense of the State Medical Society that whenever two or more component societies of the State Society see fit to join together for scientific purposes, that this union be fostered by the Council of the State Society, and that the Council take steps towards that end.

3. That our scientific program be arranged under two separate sections, Medicine and Surgery, and that the papers be arranged accordingly without any separation of special sections, thus interspersing contributions on special subjects with other papers. This does not do away with the allotment of papers under different sections, but only refers to arrangement of same in our Official Program.

The Secretary-Treasurer made his annual report. The financial status of the society showed: Balance in General Fund, $3,490.71; Medical Defense Fund, $5,301.02.

Two special recommendations made by the Secretary-Treasurer were:

1. That the Post Graduate work, instituted by the Louisiana State Medical Society at this meeting, be continued and rearranged to suit respective requirements in the future.

2. That an annual meeting be proposed of the various secre-

taries. This last recommendation was adopted, and the Post Graduate subject referred to a committee.

The Chairman of the Council, Dr. Geo. S. Bel, submitted his report. Likewise, the Councillors from all eight congressional districts. These reports were all accepted as read with the following recommendations:

1. In the report of the 1st Congressional District, Dr. Paul Gelpi recommended that members of the State Medical Society in St. Bernard Parish be invited to become members of the Orleans Parish Medical Society, which was adopted.

2. Likewise, in the report of the Councillor of the 2nd Congressional District, Dr. Geo. S. Bel, that members of the Parish of Jefferson be invited to become members of the Orleans Parish Medical Society, was adopted.

The following Committees submitted their reports which were ordered received and filed :

1. **Committee on Scientific Work—Dr. P. T. Talbot, Chairman.**
2. **Committee on Public Health—Dr. T. A. Roy, Chairman.**
3. **Committee on Medical Defense—Dr. P. T. Talbot, Chairman.**
4. **Committee on Health and Public Instructions—Dr. R. B. Wallace, Chairman.**
5. **Committee on Cancer Research—Dr. Wm. Harris, Chairman.**
6. **Committee on Publicity—Dr. P. T. Talbot, Chairman.**
7. **Committee on Medical Education—Dr. L. R. DeBuys, Chairman.**
8. **Committee on Hospital Standardization—Dr. R. O. Simmons, Chairman.**
9. **Committee on Health Problems and Education—Dr. A. A. Herold, Chairman.**
10. **Committee on Drug Addiction—Dr. W. H. Seemann, Chairman.**

The Committee on Memorial submitted a very interesting report covering deaths of members of the society for the past two years. They recommended, that in the future, owing to the difficulty of securing proper list of deaths occurring in our State membership, that the Councillor from the respective districts be required to send these direct to the Secretary-Treasurer, whenever occurring, and further recommended and adopted that, by this plan, the Committee on Memorial be abolished.

The Committee on Hospitals, Dr. J. W. Newman, Chairman, rendered a very interesting and painstaking report recommending formation of Hospital Diagnostic Unit to be fostered by the La. State Medical Society and sent out into the rural districts as needs might arise. This report created considerable discussion and after being referred to a special committee, who made a report,

the final disposition of the original report of Committee on Hospitals was referred to our Council for action.

The Committee on Budget and Finance, H. W. E. Walther, Chairman, commented favorably on the financial status of our Society and our manner of bookkeeping instituted by the office of the Secretary-Treasurer. They recommended that one-half of the balance in savings account of Medical Defense Fund be used to purchase bonds of similar nature as now held by this fund, which was adopted.

Committee on Industrial and Economic Relations to Medicine, Dr. I. Cohn, Chairman, offered a very instructive and highly interesting report containing some recommendations pertaining to workmen's Compensation Act. This was referred to special committee whose recommendations were reported back to House and adopted as follows:

"That Dr. Cohn and his Committee deserve credit and commendation for the interesting and enthusiastic manner in this difficult work. That the principle of fee schedule we agree unanimously, be fundamentally wrong, and that proper steps by the Society to obtain elimination of this fee schedule as hereby recommended are urged."

The recommendation of Dr. Cohn that doctors signing fee schedule be ineligible to membership in the Louisiana State Medical Society, we cannot approve. With regard to recommendations of Health and Insurance the question not being before any Legislative body we know of, we refer to Committee on Legislation to take proper steps as occasion arises.

The report of the Louisiana State Board of Medical Examiners was read by Dr. E. L. Leckert, giving minute statement of receipts and expenditures of State Board, along with detailed statement of progress and anticipated work of the Board in the future.

Charters were granted to Lafourche Valley Medical Society and Miss. Valley Medical Society, upon application duly executed and signed by Secretary-Treasurer and other officers of respective societies.

The following Parish Societies were reported organized during the past year: Beauregard, Natchitoches, St. Martin, Tangipahoa, Iberia, St. James, St. Mary, Vermilion.

Our delegates to the A. M. A. were instructed to favor establishment of Section on Anesthesia if deemed feasible at the approaching meeting of the House of Delegates of the A. M. A., June, 1921.

Dr. H. W. E. Walther, Chairman, Section Genito-Urinary and

Rectal Diseases, presented a request that this section be entitled "Section on Urology," which was granted. The other recommendation made by him, that his section be allowed three papers instead of two was not approved.

Upon report and recommendation of the Chairman of the Committee on Drug Addiction, the report was received and Committee discharged.

It was brought to the attention of the House of Delegates by Dr. Paul Gelpi that inforation has been received to the effect that a bureau was being established in New Orleans and Louisiana with the idea of preventing experimental work on animals (Anti-vivisectionists). This subject was discussed, referred to the Council, who recommended that the whole subject matter be referred to a special committee for investigation and report to the first meeting of the Executive Committee.

Upon motion made by Dr. Eustis, it was ordered that, if in the judgment of the Publication Committee, any paper required to be illustrated in connection with the scientific program, the expenses of same will be paid by the society.

A very extensive report containing account of Committee on A. M. A. meeting, 1920, was submitted by Dr. A. E. Fossier.

A report of the committee appointed to consider the recommendations of the Secretary-Treasurer with reference to Post Graduate work was submitted with recommendations that arrangements be left to the discretion of the Committee on Arrangements for future meetings.

The Committee on Resolutions submitted report containing resolutions which were adopted.

Dr. P. B. McCutchon, a former Secretary-Treasurer of the La. State Medical Society presented the minutes of the State Medical Society covering a period from 1878 up to 1887, which was accepted by the House with thanks.

Upon unanimous vote of the House, by-laws were suspended and Dr. B. W. Smith, Franklin, was unanimously elected Chairman of the House for next year.

The following officers were nominated and duly elected by the House:

Dr. J. E. Knighton, Shreveport, President; Dr. W. H. Harris, New Orleans, 1st Vice-President; Dr. R. Bruce Wallace, Alexandria, 2nd Vice-President; Dr. T. A. Roy, Mansura, 3rd Vice-President.

COUNCILLORS:

Dr. F. T. Gouaux, Lockport, 3rd Cong. Dist.; Dr. L. J. Williams, Baton Rouge, 6th Cong. Dist.; Dr. E. M. Ellis, Crowley, 7th Cong. Dist.; Dr. S. J. Couvillon, Moreauville, 8th Cong. Dist.

All re-elected for a Period of Two Years.

Dr. S. C. Barrow, Shreveport, was elected to fill the un-expired term of Dr. J. E. Knighton, 4th Congressional District.

COMMITTEES:

Scientific Work—Dr. P. T. Talbot, Chairman; A. Henriques, S. M. Blackshear.

Public Policy and Legislation—Dr. Homer Dupuy, W. H. Block, with President and Secretary-Treasurer of Society.

Publication—Dr. P. T. Talbot, Chairman; Amedee Granger, C. J. Gremillion, Alexandria.

Budget and Finance—Dr. Robt. Bernhard, Chairman; Drs. M. J. Lyons, M. P. Boebinger and J. O. Weilbaecher, New Orleans.

Medical Education—Dr. B. W. Smith, Franklin, 3 yrs., L. R. DeBuys, Chairman, for 1 yr. and C. W. Allen, New Orleans, 2 yrs.

Medical Defense—Dr. R. O. Simmons, 3 yrs.; Dr. Allan Eustis, period of 1 yr.; Dr. J. C. Willis, Shreveport, 2 yrs.

Health and Public Instruction was combined with Committee on Public Health containing four members: H. Fleming, E. L. Leckert, T. A. Roy and R. O. Simmons.

Cancer Research was changed to that of Committee on Cancer Control. It consists of the following: Dr. W. H. Harris, New Orleans, Chairman; Dr. J. C. Willis, Shreveport, and Dr. A. Henriques, New Orleans.

Hospitals and Committee on Hospital Standardization was combined to be known as Committee on Hospitals. Consists of the following five members: Dr. I. I. Lemann, New Orleans, Chairman; Dr. J. W. Newman, New Orleans; Dr. J. A. Lanford, New Orleans; Dr. L. J. Menville, New Orleans and Dr. G. J. Hirsch, Monroe.

Industrial and Economic Relations to Medicine—Dr. I. Cohn, Chairman; Dr. A. E. Fossier, Dr. W. H. Block, Dr. Geo. Roeling, New Orleans.

Dr. W. H. Seemann was elected as delegate to the A. M. A. for a period of 2 yrs. Dr. P. Gelpi, alternate, 2 yrs. Dr. L. R. DeBuys, delegate for 1 yr. Dr. T. A. Roy, alternate for 1 yr.

The next place of meeting was decided for Alexandria.

The following resolutions were adopted:

Whereas the ladies, the local medical profession, Mayor of the City of New Orleans, the Chairman and Committee of Local Arrangements, Loyola Post Graduate School of Medicine, Tulane University, Tulane Post Graduate School of Medicine, Presbyterian Hospital, and local press have left nothing undone to make the present meeting of the Louisiana State Medical Society both pleasant and profitable;

Be it resolved; that the thanks be extended upon behalf of our Society to all concerned for their gracious and untiring efforts to make our stay in their midst most pleasant and profitable.

Whereas the officers and clerical force of the Society have been untiring and successful in their efforts to maintain the strength and dignity of our Society during the past year,

Be it resolved that the thanks of the Society be extended to our

past officers and the office force for their unfailing devotion to our beloved Society.

Whereas it has been generally commented that the business of this meeting has been transacted with such punctuality and smoothness that the fact that there was a machinery of operation was scarcely apparent. Be it resolved that thanks and appreciation be extended to our Secretary-Treasurer, Dr. P. T. Talbot and his assistants whose foresight and efficiency rendered the above possible.

NEWS AND COMMENT.

THE BOSTON SESSION OF THE AMERICAN MEDICAL ASSOCIATION. The meeting of the American Medical Association will take place this year in Boston, June 6 to 10. Reduced rates are to be put in effect by railroads under the Central and the Western Passenger Associations and in some instances round trip rates will be made. These rates, however, apply mostly to states in the Northern, Western and Eastern parts of the country, while from points in the South little or no attention seems to have been paid by the railroads in making the trip attractive by reducing the fares to points of connection with other lines. Members who desire to take advantage of special railroad fares should send to the Secretary, Dr. A. R. Craig, No. 535 North Dearborn Street, Chicago, for identification certificates.

SOUTHERN PUBLIC HEALTH LABORATORY ASSOCIATION. Directors and sub-directors of both municipal and state laboratories will be eligible to membership in the Southern Public Health Laboratory Association established for the purpose of securing uniformity of methods and procedure among the Public Health Laboratories of the Southern States. The first meeting was held in Atlanta on March 16 and the following officers were elected: President, Dr. Clarence A. Shore, Raleigh, N. C., and Secretary, Mr. T. F. Sellers, Atlanta.

CHANGE IN BOARD OF GOVERNORS OF THE N. A. R. S. At a special meeting of the National Anesthesia Research Society, at Columbus, Ohio, in April, Mr. Stephen Morris resigned as President and member of the Board of Governors and Dr. E. I. McKesson, of Toledo, was elected to fill his place. Dr. R. L. Clements, of Philadelphia, was elected to the Board of Governors to fill the unexpired term of Mr. Morris. Dr. W. L. Jones, of Columbus,

was chosen to fill the as yet unfilled position of 2nd vice-president. Dr. W. D. B. McNeider, of the University of North Carolina, Dr. B. H. Schlomovitz, of Milwaukee, and Dr. Wm. Webster, of the University of Winnepeg, were elected to the Research Committee.

Meeting of the St. Tammany Parish Medical Society. The regular annual meeting of the St. Tammany Parish Medical Society this year took the form of a dinner, served at Gabe's Tavern on April 14. After the transaction of business quite a number spoke. A toast was tendered by Dr. A. C. Maylie to Dr. N. M. Hebert on his fiftieth wedding anniversary. The other members present joined in the words of congratulation and Dr. W. J. Durel also paid a tribute to Dr. Hebert, who in response, gave a humorous picture of the physician in the pioneer days of the practice of medicine. The following resolution was adopted: "Whereas the Almighty God in His wisdom has seen fit to allow the celebration of the Golden Anniversary of Dr. and Mrs. N. M. Hebert on the 50th year of their married life, The St. Tammany Parish Medical Society extends to Dr. and Mrs. Hebert hearty congratulations and felicitations and expresses the sincere wish that the family will have for many more years the guidance and wisdom of these beloved parents. Dr. Hebert as a doctor, as a citizen and father of family is a living example to the rank and file of the medical profession. Therefore, the Society in executive session moves that a copy of these resolutions be printed in the minutes, a copy sent to the New Orleans Medical and Surgical Journal and published in the St. Tammany Farmer.

Roentgen Rays Has Another Martyr. William Ironside Bruce, of the Charing Cross Hospital, London, died, after illness of only two months, at the early age of 45 years, his death being occasioned by a severe form of aplastic anemia caused by the penetrating rays of the roentgen tube. The death of Dr. Bruce has brought the appointment of a committee of physicians, physiologists and roentgenologists to investigate the conditions which tend to bring about the death of the workers in the field of roentgenology and radium.

Meeting of the Arkansas Medical Society. The annual meeting of the Arkansas Medical Society took place at Hot Springs, Arkansas, on May 3, 4 and 5. It was noted that at the close of

1920 the total membership of the Society was 1140, the largest in the history of the society. All meetings were held in the Arlington Hotel and the Entertainment Committee proved adequate in supplying various forms of amusement and the sessions were interesting and instructive. Alltogether, the meeting was very satisfactory.

LEXINGTON CLINIC. An association consisting of Drs. David Barrow, Woolfolk Barrow, W. O. Bullock, Ernest B. Bradley, W. T. Briggs, F. H. Clarke, C. C. Garr, J. T. McClymonds and W. S. Wyatt, has been formed under the name of the Lexington Clinic for the purpose of the practice of group medicine. The Clinic is provided with a modern Clinical Laboratory and equipment for X-ray diagnosis and treatment. An adequate supply of radium is available for therapeutic use. The medical profession is extended a cordial invitation to visit the Clinic.

MEETING OF THE STATE MEDICAL ASSOCIATION OF TEXAS. This meeting was held on May 10, 11 and 12, at Dallas, Texas. The opening exercises and all general sessions, as well as the scientific exhibit were conducted in the City Temple, and the registration office was situated in the Oriental Hotel. A reception committee representing the Women's Auxiliary of the Dallas County Medical Society were on duty at the principal hotels and at the office of the registration for the purpose of receiving visiting women. An excellent program was followed throughout the meeting and many social features lent added interest to the occasion, which included alumni banquets, and memorial services for the members who had died during the past year were conducted. Other meetings which were held jointly were the Texas Railway Surgical and Hygienical Association and the Texas Roentgen Ray Society, to which the members of the State Association were invited.

REGULATION OF MEDICAL DISTRIBUTION OF BEER AND WINE. On April 7 the regulations for the prescribing of beer and wine. to be enforced tentatively, were made public for the practicing physician and these are as drastic as could be imposed under the terms of the Palmer ruling. Summarizing these regulations we note that a limit is placed on beer to be prescribed for any one patient during any one month so that only 4 1/7 gallons, or two glasses a day may be allowed. Only one physician may prescribe for any one patient at the time. Only physicians

may issue certificates for beer and wine and only druggists may fill them, both being held to strict accountancy. Registered pharmacists cannot be employed by wholesale brewers or druggists to fill prescriptions and a physician may not fill a prescription for his own use. Only a duly qualified brewer or wine maker is allowed to manufacture these beverages for medicinal use, and only this on the property where the manufacture is specified. It must be noted, however, that these regulations are only tentative.

Co-Ordination of National Health Agencies. On May 1 the National Health Council opened new offices in the Penn Terminal Building, using two floors. In this building will also be located the offices of the American Social Hygiene Association, the National Committee for Mental Hygiene, the National Organization for Public Health Nursing, co-operating with the American Nurses' Association and the League for Nursing Education, and the National Tuberculosis Association, all on the fifteenth floor, while on the sixteenth floor will be located the offices of the American Public Health Association, the Bureau of Social Hygiene, the Child Health Organization of America, and, probably, the liaison office of the United States Public Health Service, the National Health Council, with the Common Service Committee; the Maternity Center Association, the New York Diet Kitchen Association, the New York Community Service, and the American Society for the Control of Cancer.

American Field Service Fellowship for French Universities. The Society for American Field Service Fellowships for French Universities, among other awards, granted the Fellowship in Medicine to Percival Bailey, a graduate of the School of Medicine of the Northwestern University. Applications for the 1922-23 Fellowships should reach the Secretary, Dr. I. L. Kendel, at 522 Fifth Avenue, New York City, not later than January 1, 1922.

American Hospital in Paris. The Board of Directors of the American Hospital in Paris has purchased a new building site near the present hospital. A new 100 bed hospital building will be erected after plans drawn by C. C. Knight an American architect. The building fund of 3,750,000 francs is to be increased to 7,000,000 francs and an endowment fund of 4,500,000 will be provided.

INFLUENZA HITS RHINE ARMY. The Second Battalion of the Eighth Infantry has been quarantined by medical authorities since the development of forty-five cases of epidemic influenza which broke out among the soldiers belonging to the United States occupational army stationed near Coblenz.

TEXAS STATE BOARD OF MEDICAL EXAMINERS. The semi-annual meeting of the Texas State Board of Medical Examiners will be held on June 21, 22 and 23 in the Hall of the House of Representatives, Capitol Building, at Austin, Texas, instead of at the Medical College at Galveston, as previously announced. Candidates for the examination should write to Dr. T. J. Crane, Secretary, addressing him at No. 918-19 Dallas County State Bank Building, at Dallas, Texas, for blanks and other information.

MISSISSIPPI STATE MEDICAL ASSOCIATION. The annual meeting of the Mississippi State Medical Asssociation was held at Laurel on May 10 and 11. An interesting program was well carried out. Good management and enthusiasm, which usually characterize the meetings of this Association, were especially noticeable. The following physicians from New Orleans were in attendance: R. C. Lynch, J. T. Halsey, R. A. Strong and Elizabeth Bass.

FOURTH DISTRICT MEDICAL SOCIETY MEETING. The regular semi-annual meeting of the Fourth District Medical Society of Louisiana was held at Shreveport on April 5. The meeting of the Shreveport Medical Society was held at the same time and both Societies went on record as favoring State aid in establishing a Tuberculosis Hospital. A number of interesting papers were read and a Symposium on Abdominal Pain conducted at the evening session, followed by demonstration of X-ray pictures, a business session, refreshments and adjournment. A symposium on Uterine Hemorrhage will be held on June 7 by the Shreveport Medical Society.

HONOR CONFERRED ON DR. LAPLACE. Dr. Ernest La Place, formerly of New Orleans, has been decorated as an officer in the French Legion of Honor by Rene Viviani, special envoy of France. The ceremony took place on April 19 in New York. In 1902 the "Palmes Acadèmiques" were conferred upon Dr. LaPlace by the French government in recognition of his valuable medical researches. Later, in 1906, he was made a chevalier in the Legion of Honor.

RESOLUTION ON THE DEATH OF DR. WILLIAM KOHLMAN. A resolution on the death of Dr. William Kohlman was adopted by the Loyola Post-Graduate School of Medicine, as follows:

"Whereas, in the death of Dr. Kohlman, the Medical Profession has suffered an irreparable loss, for his was a life filled with many activities, noble endeavors, and lofty purposes. He lived intensely for the good and happiness of others. His mission of mercy and help to the indigent sick was of such a character and so generously given that his death must prove a genuine sorrow and a real calamity to many of the suffering poor, and

"Whereas, His passing away deprives the Board of Directors and the Faculty of the Loyola Post-Graduate School of Medicine of a wise counsellor and an efficient teacher. He became identified with the School in the very beginning of its career and was, in fact, one of its enthusiastic organizers. He ever remained loyal to its purposes and devoted to its interests, therefore,

"BE IT RESOLVED, That we, who deeply appreciate the sterling qualities of mind and heart of our deceased colleague, and we who realize the scope of his valuable services to our School, in a spirit of reverence, gratitude, and love, we do hereby order these resolutions to be inscribed in our Minutes, thus indulging the fond hope that we can help perpetuate the name and deeds of the one so worthy of such remembrance, and

"BE IT FURTHER RESOLVED, That we tender to his wife, and to his family, our heartfelt sympathy in this, their greatest bereavement, and that we order a copy of these resolutions be sent to the family by the Secretary of the Board."

BEQUEST. By the will of the late Dr. Wm. Kohlman, a bequest of $2,500 is made to the New Orleans Hospital and Dispensary for Women and Children.

PERSONALS: Dr. C. C. Bass attended the meeting of the Georgia State Medical Society on May 5, and lectured before the Johns Hopkins School of Medicine, in the series of DeLamar lectures, on May 9, and then went to Atlantic City to attend the meeting of the Association of American Physicians on the 10th and 11th of May.

Dr. Chaille Jamison, Assistant Professor of Clinical Medicine of the School of Medicine of Tulane University, has been appointed on the staff of the City Board of Health and will be attached to the bacteriological laboratories.

Dr. Herbert Winsdor Wade, formerly of New Orleans, has been appointed President of the Manila Medical Society. Dr. Wade is a Tulane graduate of 1913.

Dr. J. A. Henderson after four years' service at the naval hospital Charleston, S. C., has received his discharge and returned to New Orleans to resume practice.

REMOVALS: Dr. A. L. Peters, from McNary, La., to 165 Elk Place, New Orleans.

Dr. J. A. Crawford, from Sulphur, to Longville, La.

Dr. F. E. Lindahl, from Hammond, La., to Royal, Illinois.

Dr. C. C. Thompson, from Delhi to Shreveport, La.

Dr. W. M. Jackson, from Otis to Joyce, La.

DIED: On May 11, Dr. Harry T. Igne, of Mobile, Alabama, aged 60 years, and a resident of Mobile for the past forty years.

Dr. Roland F. Thomas, on May 9, aged 38 years, at New Orleans, La.

BOOK REVIEWS AND NOTICES

All new publications sent to the JOURNAL *will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the* JOURNAL *to review as many of the works accepted as possible, the editors will be guided by the space available and the merit of respective publications. The acceptance of a book implies no obligation to review.*

A Synopsis of Medicine, by Henry Letherby Tidy, M. A., M. D., M. Ch. (Oxon.), F. R. C. P. (Lond.). William Wood and Company, New York, 1921.

This book aims at providing a synopsis of such principles of medicine as are of importance at the present time. Into its relatively small bulk the author has compressed an extraordinary amount of information, which is in the main correct and up to date. Whether a work of this character will find a large field of usefulness appears doubtful to the reviewer. Perhaps, as the author hopes, it may prove of assistance to those who have to review rapidly their knowledge of medicine in general or of some disease in particular. For such purposes it seems admirably suitable. J. T. H.

The Diagnosis and Treatment of Heart Disease: Practical Points for Students and Practitioners, by E. M. Brockbank, M. D. (Vict.), F. R. C. P. Paul H. Hoeber, N. Y.

In this little work, small enough to slip into one's pocket, the author has succeeded in putting simply, clearly, and concisely the elements of cardiac anatomy, physiology, and pathology as well as those of diagnosis and treatment. It cannot be expected that in a work of this size (less than 160 small pages) anything beyond the elements can be discussed, but this discussion is clear and up to date and is savored by the salt of common sense and wide clinical experience. Well chosen cuts, diagrams, and curves serve to illustrate and elucidate the text. Like most modern cardiologists Dr. Brockbank has escaped from the influence of the school which over emphasized the significance of cardiac murmurs. Those who have not the time (or the will?) to read the larger works on this subject, this booklet will prove a fairly acceptable substitute. J. T. H.

Principles of Biochemistry, by T. Brailsford Robertson, Phd., D. Sc. Lea and Febiger, Philadelphia, 1920.

In the preface the statement is made that "while the design of the author has been primarily to write a text-book for medical students and students intending to specialize in biochemistry and physiology, the attempt has also been made to compile a work which will be of service to the agricultural student, the student of general biology, or the industrial chemist who is engaged in handling biological products."

In accordance with this rather ambitious plan the author has, in addition to the usual matter contained in text-books of biochemistry, included much material which is usually to be found in works on physiology. Chapters dealing with such subjects as artificial fertilization, old age, and senescence, the fading of memory traces, sleep, etc. being included.

As is to be expected from the author's extensive investigations in these fields, the application of physical chemistry to biochemical phenomena, and the physiology of the ductless glands is treated in considerable detail, with the result that the sections dealing with such fundamental subjects as urine, blood and milk have been cut to the minimum.

It is to be questioned whether this work is of the type best suited for the routine instruction of the average American medical student, although its value to the teacher or student of biochemistry or physiology, or to the physician seeking information of recent advances in these sciences, is unquestionable. W. DENIS.

Physiological Chemistry, by Albert P. Matthews, Ph. D. William Wood and Co., New York, 1920.

The fact that this work has been reprinted five times, and has passed through three editions since its appearance in 1915, gives evidence of its popularity. The text has been thoroughly revised, the chapter on vitamines in particular, having been practically rewritten. As in the case of the earlier editions the last 260 pages are given over to a description of laboratory methods of interest to the physiological or pathological chemist. In this section extensive additions have been made, particularly in the portion dealing with blood analysis; the popular "System of Blood Analysis" of Folin and Wu; the newer micro-methods for the determination of the inorganic constituents of blood, and for the study of acidosis by means of blood examinations are described in considerable detail. The section on urine analysis has also been enriched by the description of some of the newer technique, although here the revision has not been so thorough as in other sections, as much dead wood still remains in the form of descriptions of methods of urine analysis long obsolete.

This volume will prove, as in the case of the earlier editions, a valuable reference book for the physician desiring information on newer methods of laboratory examination or on the socalled "theoretical" aspect of the physiological chemistry. W. DENIS.

The Practical Medicine Series, under the general editorial charge of Charles L. Mix, A. M., M. D., Vol. VIII: Eye, Ear, Nose and Throat. Edited by Casey Wood, M. D., Albert H. Andrews, M. D., and George E. Schamburg. Series of 1920. The Year Book, Chicago, Illinois.

The handy volumes of the Practical Medicine Series long ago firmly

established themselves in the esteem and affection of the profession. The light volumes which compose each issue cover all subjects pertaining to medical science, so that no notable advance is overlooked. While these volumes are of primary interest to the general practitioner, still they are so arranged that any specialist may select the volume that appeals to him without buying the entire series.

The present volume (Ear, Nose and Throat) is the product of men to whom we have grown accustomed to look for light and leading. The present book is up to the high standard that we have found in their contributions to these series for years past. An analysis of the contents is unnecessary, for it would have to embrace all the progress in 1920 that is worth knowing in the branches discussed. McSHANE.

The Practical Medicine Series. Comprising eight volumes on the year's progress in medicine and surgery. Under the general editorial charge of Charles L. Mix, A. M., M. D. Volume II, General Surgery. Edited by Albert J. Ochsner, M. D., F. R. M. S., LL. D., F. A. C. S., Major M. R. C., U. S. Army. The Year Book Publishers, Chicago, 1920.

This volume opens with an interesting chapter on anesthesia and analgesia in which all essential points in the year's progress in both local, spinal and general anesthesia are discussed.

A wealth of interesting material is spread out over the pages of this volume which maintains the high standard established by this publication. The world's literature is fairly thoroughly reviewed except from the central empires which are not available, and as is to be expected it contains much of war surgery selected from the best of the year's contributions. Civil surgery has, however, not been neglected and is well represented in many excellent selections.

The volume is well indexed and contains many excellent illustrations. ALLEN.

The Surgical Clinics of Chicago, Oct., 1920. Vol. 4, No. 5. W. B. Saunders Co., Philadelphia, 1920.

It is difficult to pick up any number of these clinics and not find papers of more than ordinary interest; this however would naturally be expected from the high standing of the contributors.

The October number is no exception to the rule and presents articles by the following:

Drs. E. Wyllys, Edmund Andrews, Charles Louis Mix, David C. Strauss, Arthur Dean Bevan, Golder L. McWorther, Richard L. Tiven, Kellogg Speed, Carl Beck, Alfred A. Strauss, Albert J. Ochsner, Daniel N. Eisendrath, Frederick G. Dyas, Allen B. Kanavel, Edward Louis Moorhead, Geo. E. Shambaugh, Edward Lyman Cornell and Roy L. Moodie. ALLEN.

The Surgical Clinics of Chicago, Vol. 4, No. 6, Index number. W. B. Saunders Co., Philadelphia, 1920.

This number opens with an excellent article by Dr. Bevan on "Extrophy of the Bladder" and is followed by other cases in the clinic. Dr. Kellogg Speed's case of "Tendon Transplatation for Wrist Drop," which is freely illustrated, will be found quite instructive.

There are many other splendid articles notable among them "The after Treatment of Infections of the Hand" by Allen B. Kanavel, author of the excellent book on this subject. ALLEN.

MORTUARY REPORT OF NEW ORLEANS.

Computed from the Monthly Report of the Board of Health of the City of New Orleans, for April, 1921.

CAUSE.	White.	Colored.	Total.
Typhoid Fever	2	----	2
Intermittent Fever (Malarial Cachexia)	----	----	----
Smallpox	----	----	----
Measles	3	----	3
Scarlet Fever	1	----	1
Whooping Cough	3	----	3
Diphtheria and Croup	----	----	----
Influenza	3	1	4
Cholera Nostras	----	----	----
Pyemia and Septicemia	----	----	----
Tuberculosis	36	31	67
Cancer	29	1	5
Rheumatism and Gout	----	1	1
Diabetes	7	----	7
Alcoholism	1	----	1
Encephalitis and Meningitis	2	2	4
Locomotor Ataxia	1	----	1
Congestion, Hemorrhage and Softening of Brain	33	7	4
Paralysis	2	1	3
Convulsions of Infancy	1	----	1
Other Diseases of Infancy	10	8	18
Tetanus	1	1	2
Other Nervous Diseases	5	----	5
Heart Diseases	54	34	88
Bronchitis	----	----	----
Pneumonia and Broncho-Pneumonia	21	15	6
Other Respiratory Diseases	1	2	3
Ulcer of Stomach	----	----	----
Other Diseases of the Stomach	----	2	2
Diarrhea, Dysentery and Enteritis	20	13	3
Hernia, Intestinal Obstruction	5	2	7
Cirrhosis of Liver	6	----	6
Other Diseases of the Liver	2	2	4
Simple Peritonitis	----	----	----
Appendicitis	6	5	11
Bright's Disease	19	12	
Other Genito-Urinary Diseases	9	3	12
Puerperal Diseases	4	5	9
Senile Debility	2	----	2
Suicide	6	----	6
Injuries	15	9	24
All Other Causes	28	22	50
TOTAL	348	189	5

Still-born Children—White, 30; colored, 19; total, 49.

Population of City (estimated)—White, 290,000; colored, 110,000; total, 400,000.

Death Rate per 1000 per annum for Month—White, 14.40; colored, 20.62; total, 16.11. Non-residents excluded, 14.43.

METEOROLOGIC SUMMARY (U. S. Weather Bureau).

Mean atmospheric pressure	30.05
Mean temperature	68.
Total precipitation	4.87 inches

Prevailing direction of wind, southeast.